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identity predicated on their cultural heritage. The program was considered successful and is being considered as a treatment model for the entire state. The success of this program is not only a testament to the work of SKIAP but also to the commitment of Port Graham and the other North Pacific Rim communities in overcoming social problems. Some people assert that the spill only reinforced the determination of the villagers to shape their future in more positive terms.

There were at least two or three attempted suicides in recent months within the village. Because attempted suicides are often covered-up by family members it is difficult even for health providers within the village to know about the extent of the problem. The village of Port Graham has an active suicide prevention program which is attempting to cope with the problem and prevent suicide attempts through non-conventional programs based more on cultural and social resources than on conventional therapy. For more conventional therapeutic approaches they rely on the coordination of several mental health agencies in the region.

The village program maintains a community center that is open on a regular basis to both children and adults. The center is run by the suicide prevention coordinator and provides a variety of activities such as video games, sports, and various other recreational activities for community members. Resources include a fairly large library with a variety of reading material including self-help books and tapes. They also conduct workshops on substance abuse, parenting, and communication skills. Moreover, at the center social mixing is encouraged by holding pot luck dinners based on traditional subsistence foods. They also conduct traditional activities such as kelp gathering to reinforce their cultural heritage and to provide people with social outlets and opportunities for social exchanges that help to combat isolation and depression.

Medical

The health aide and director of the clinic worked for VECO for approximately one week and resigned because she didn't care for the job. Although, the clinic wanted to hire an additional health aide it was unable to do so because it could not get anyone to take the position. It simply could not compete with the VECO salary scale. During the initial stages of the cleanup response, clinic personnel were busy assembling first aid kits for the boats for which they were later reimbursed by VECO. This activity put a strain on the clinic's resources for a while.

The clinic saw a sharp increase in the number of upper respiratory infections including pneumonia. They treated more leg, foot, and hand injuries. They also had an increase in burn cases and skin rashes. Patients also came to the clinic and consulted the health aide about their emotional suffering. The director stated that people who had previously never

shared anything with her would stop her on the road and tell her about the pain, the grief and the guilt that they were suffering from.

Changes in Personal Experience

Many individuals spoke of severe sadness, depression, and disillusionment. The following two accounts are indicative of the kinds of experiences recounted by villagers: One man was very excited about the thought of being employed on the cleanup effort and the ability to make large sums of money. He was so excited he could barely contain himself and hurried everywhere in anticipation of the prospect. Finally, they put him on a boat and brought him to a heavily oiled beach. He eagerly jumped out of the boat and sank in oil to his knees. He was surrounded by death and destruction. There were dead birds and animals lying about the beach. He fell to his knees and cried and he became deeply depressed when he realized that his elderly father would probably never live to see a clean beach or go fishing in that area again. The thought of this stayed continually in his mind.

Another women had a different view of the spill and its impact on people. She worked as a cook on a boat for the summer and she witnessed people in various states of agony, depression and unhappiness. In doing so she watched people fluctuate radically from one mood to another. For instance one moment people would be extremely high and the next moment they would be extremely depressed. She never thought she would ever witness such extreme mood swings.

Other people spoke of how difficult they felt it was to exert control over anything in their lives. They felt so out of control and feelings of helplessness and dependency resulted. Some people spoke of extreme rage and frustration about the spill and their inability to influence the events around them. One person said the spill caused him to challenge the assumption that experts know what is best. He concluded that federal, state, and corporate experts didn't know what they were talking about and were unable to lend any sense or meaning to the events surrounding the spill. He spoke mainly in terms of the lack of reliable and definitive information on the potential toxic pollution of foodstuff in the environment.

Village of English Bay

The village of English Bay is located on the southwestern end of the Kenai Peninsula. It is approximately twenty-four miles from Homer and is reachable by plane or boat. A four mile trail connects the community with Port Graham. This predominately Aleut community of a little over 200 people is unincorporated and within the jurisdiction of the Kenai Peninsula Borough. The village is governed by the Village Council and is presently seeking IRA status. The village has a mixed cash-subsistence economy but is still very dependent on subsistence activities for much of its food and for the preservation of its cultural heritage. There is an airstrip and one small store located in the village.

Response Effort

When the news of the spill first reached the village most residents did not think the oil would ever endanger their community. Their initial reaction was sadness for their relatives and friends living in the Prince William Sound Region. Approximately a week after the spill occurred various state and federal authorities such as DEC, the Department of Health and Social Services, and the Coast Guard began contacting the community about the approaching spill. These calls were followed by inquiries from the North Pacific Rim, the Chugach Corporation, and VECO. When the villagers realized the potential harm to their community, some of them got together and discussed what emergency measures they could take in advance of the oil reaching their subsistence grounds. Their reaction was to go clam digging and hunting in order to stock their freezers and set aside food before their subsistence resources were heavily damaged.

However, not everyone was responsive and decisive. According to one leader there was a lot of "unclear" thinking. Some residents just assumed a "wait and see" attitude. As the oil was advancing closer some villagers went by boat to visit an oiled beach. On their return they appeared stunned and dazed. They didn't say very much or smile and they appeared depressed. They told the villagers they were sickened by the sight of the impact. Nobody knew what to do. Nobody knew how to build booms. When the oil finally reached their waters they were heavily contaminated with oil. Within a short time all of the traditional and vital subsistence areas of the community were oiled severely. The damage was extensive. Areas like Port Chatham, Windy Bay, and Elizabeth Island were hit extremely hard and oiled repeatedly. The mortality rate of wildlife in these areas was high. Eventually, even the beaches in front of the village were oiled.

In the second week of April, VECO representatives appeared in the village and stated they would hire every available adult until the middle of September. They also said they would send cleanup materials in the near future. The materials arrived late and were considered inadequate for the task. Many villagers were resentful that the nearby community of Port Graham and the city of Homer received cleanup materials some time before English Bay.

This angered the villagers because the community had been given priority since it was in the direct path of the oncoming oil. Some people thought they were over-looked because the MAC group in Homer and the city of Homer had more political influence and power than their small village.

One leader asserted that they were the first village to know how to build booms adapted to the situation. The construction, however, involved a lot of guess work because they had received no instruction on how to build booms from VECO. Nevertheless, they taught themselves to construct the boom. What knowledge they did have however, they felt was unappreciated by VECO and Exxon. The skiff operators possessed considerable information about the weather and the tides which they thought was important to the response effort. Rather than take advantage of this knowledge, the villagers claim Exxon suppressed it. They think Exxon more or less implied that the villagers didn't know what they were doing. This caused a considerable amount of anger, frustration, and resentment. Furthermore, they felt "strangled" by VECO and resented having to get approval from Anchorage and Homer. They strongly disliked having to be supervised by outsiders.

Although VECO promised the village that they would employ workers until the middle of September, by late July they began cutting back on the cleanup crews and terminated everyone by the middle of August. Many felt this was just one of many instances in which VECO broke its promises to the community.

Villagers also complained about their relations with other outside groups and agencies. Most complained about poor communications. With the exception of VECO, the outside representatives changed so frequently that it was difficult to establish effective communication with them.

People also had difficulty with the constant flow of outsiders into the community. People were always coming and going and, more often than not, much to the annoyance of the village, they arrived unannounced. Villagers also became irritated with the constant press of the media and their "endless" questions. Although there was a constant influx of strangers into the community, most villagers felt the impact of the long term visitors was minimized because the village established a set of conditions which visitors had to consent to in order to stay there.

Local Government

The arrival of VECO in the village had the same consequences for the operation of local government it had for many communities. One leader stated that VECO "literally took over the town . . . they strangled us." One man made an analogy with the Federal government's American Indian policy during the 19th century. He said the government was allowing oil interests to act in their own best interests over and above the interests of the Natives just

as the government once allowed American business interests to over run the American Indian. Another individual compared VECO's "take over" as similar to the former Russian policy toward the Natives.

Because the entire village worked on the cleanup effort, the Village Council found it difficult to carry on business as usual. Local governmental operations were over run by the excessive demands of the spill. Prior to the spill, the Village Council was involved in the lengthy and complicated process of applying for IRA status for the village. The events resulting from around the spill and cleanup detracted severely from these efforts and the project continues to lag behind because the village government is still preoccupied with spill-related issues. The village administrator stated that the overwhelming majority of his mail is spill-related and he has not been able to keep up with it at the rate it has been arriving. He expressed concern about how this work load continues to hinder the IRA application process.

The spill was responsible for the delay of several projects. For instance the land-fill started to over flow because of the additional waste produced by Exxon and VECO. Prior to the spill, the village had a funding contract with the Borough to underwrite the cost of keeping the site clean. Once the spill occurred, the village fell behind in billing the Borough for the cleanup costs. Moreover, the spill-related activities prevented them for applying for future funding for various administrative grants because they could not take the time to write the grants. The village also had to delay upgrading and repairing the air strip as a result of the spill. Finally, the spill put excessive demands on school facilities. VECO took over the pre-school for their command center and displaced the young children. The children had to be moved to a home in the community that was inadequate to the task and caused hardship on both the teachers and the children. The K-12 school also suffered inconveniences. The principal reported that there were as many as ten new children in the school which stretched their limited resources. Families who had moved into the village to get jobs on the cleanup crews had remained through the winter with the hope of obtaining jobs in the spring. VECO had also rented tents and computer equipment from the school. The payment for this rental was not made until eleven months after they signed the agreement and only after a prolonged process of billing. The school district finally had to go the district attorney's office in Anchorage to seek assistance in obtaining the payment.

While the village of English Bay was fairly unified in its response to the oil spill and in its dealings with outsiders there existed some dissension and controversy over the fact that the Village Council president was on the VECO payroll and remained on the payroll for some time after the cleanup activities ceased. One person said that some people in the village despised the president for his willingness to work for VECO and for his passive attitude toward Exxon.

Changes in Community

The influx of large amounts of money and the introduction of the VECO organizational hierarchy had negative consequences for the social organization of the village. The additional money was to blame, in part, for the increased consumption of alcohol and substance abuse and for the switch from pot smoking to cocaine use. The money has also been blamed for increased materialism, greed, and the breakdown of social relations. Many people reported that having "so much money was stressful." They reported they were unused to having a discretionary surplus and felt a sense of dread having to manage large sums of money. On the other hand the money also enabled many community members to pay off their bills, pay for home improvements and purchase new or larger skiffs which are indispensable in a community which depends so heavily on accessibility to the ocean.

As in Port Graham, the presence of the VECO organization created considerable social tension and resentment. At times, social roles were reversed as young people were placed in charge of their elders. People were given authority over their relatives and neighbors and some were reported to have assumed an arrogant role. People resented being ordered around by their life long friends or sibling. Competition between individuals and families increased and ruptured the social fabric. One villager said it was unnatural for a community member to be arrogant among fellow villagers but the VECO organizational structure resulted in people behaving in just that manner.

Despite these social re-arrangements people also spoke in terms of closeness and social solidarity. The village administrator thought the spill would make the village a lot stronger and closer in the long run. Another informant stated that the "positive side" of the spill was that it made the community realize that, no matter what they go through, they have got to help one another out. One person described life on the cleanup crews as a time of closeness. She noted that working on a remote beach with her fellow villagers was distinctly different from the more bureaucratic setting of the village. Although the work was often arduous and difficult and at times depressing it was also a time for families and friends to be together. Sometimes there would be over twenty people at a camp where people took turns cleaning and cooking, and people spent time sharing and talking.

The village of English Bay experienced both negative and positive interactions with other communities. Cleanup workers on leave in Homer were spit upon and beaten up on a couple of occasions. Some people explain these incidents as primarily racist while others explain that many people in Homer had a deep-seated hatred of Exxon and anything or anyone who had anything to do with them.

On a more positive note, the village of Tyonek shipped salmon to English Bay to be distributed to each of the families and the village of Angoon in Southeast Alaska sent the

villagers seal meat and sea weed. Frozen fish were also donated by the Chugach Corporation.

The VPSO in the village took a leave of absence to work for VECO and left the community for a time. There were occasions when he was out of the community and his services were needed. According to trooper oversight reports, by September there was a "marked rise in the number of alcohol-related activities." By the end of the month the VPSO had responded to approximately 30 calls for assistance. According to the North Pacific Rim coordinator for the VPSO program, the real impact of the spill is only beginning to manifest itself in the villages as reports of alcohol abuse and family violence increase. The level of violence has risen to such a level in English Bay that the VPSO's life and the lives of his family members have been threatened by one individual. While this increase in crime is significant, it by no means indicates that there is widespread criminal activity or social disfunction, but it is a serious indicator of prolonged stress.

Way of Life

Unfortunately, the spill occurred at probably the worst point in the yearly subsistence cycle, when resources from the past year were exhausted and just before the spring harvesting of shellfish, the gathering of kelp and herring roe, and the beginning of the salmon runs. In addition, with the approach of spring, the villagers were looking forward to the social sharing and exchanges that occur during subsistence activities. The villagers felt deprived of what for many is their favorite time of the year when the whole village can socialize with one another and renew their cultural heritage which has come to be centered almost solely around subsistence activities.

The villagers fear that the long-term impact of the spill will sharply curtail their subsistence activities and deprive them of much of the food on which they depend for survival and the maintenance of their culture. The uncertainty of this situation has caused considerable stress and depression among all the villagers. As in all the other Native villages in the North Pacific Rim, they feel their way of life has been threatened by the spill. They blame this threat on the white world which in the past has been responsible for robbing them of most of their culture. Commercial fishing issues are inextricably linked to this issue. Were they to lose their fisheries they would lose most of their cash income and jeopardize their way of life as well. Their cash income has already been affected by the closing down of the fishing and the nearby cannery in Port Graham last year and by the closing of the cannery this year. The residents of English Bay are as dependent on the cannery as are the residents of Port Graham. There is fear that the cannery will have additional difficulty next year in obtaining contracts from buyers. All of these fears contribute to a terrible sense of uncertainty and anxiety.

Family

As mentioned above, the disruption of the spill upset the yearly cycle and family life. One villager described the disruption as follows;

It was very stressful because, you know, in the summertime that's when a lot of the elderly or a lot of the women are left behind to tend to their family, tend to their children. This is a time to share, a time to gather. This is how you show them this is how you survive in a village. You go down to the reef and you pick the bidarkies, you pick seaweed, you eat snails, you taught your kids the way life used to be . . . this summer you couldn't do that.

Instead, the elderly and the children were left behind and often neglected because most of the villagers were out of the village working on the cleanup. The elderly were left alone and had less help with chores for which they required assistance. The children were often left unsupervised. There weren't enough baby-sitters in the village and often the oldest child was left in charge of its siblings. One observer said;

The kids just went wild, they were just free, you know, nobody was really there to watch them. People that were in the community like the office workers, they would keep an eye on them as much as they could, but we weren't out there actually baby-sitting, we were just keeping an eye on them. But the village kids were just able to kind of run wild.

Mental Health

English Bay, like the neighboring village of Port Graham, had been recognized before the spill as a village that had made significant progress in reducing the incidence of domestic violence, sexual abuse, and drug and alcohol abuse. This progress was hindered by the spill disaster.

According to service providers from North Pacific Rim and domestic violence counselors from outside the community, there has been an increase in domestic violence and sexual abuse. At one point, it was reported that domestic violence was so serious that young children were using their friends houses as safe houses in order to avoid abuse in their homes. The extent of this practice and when it began to get serious is unknown for several

reasons. First, as previously mentioned, counselors from outside the village were asked to stay out of the community during the summer. Second, many were reluctant to discuss the topic with outsiders, even service providers. It is clear that domestic violence increased to some degree during the fall after the cleanup ceased. The VPSO and North Pacific Rim sources have noted that many of the social effects of the spill are just beginning to emerge. These include an upswing in domestic violence incidents.

There are certainly more widespread and substantiated accounts of the recurrence of drug and alcohol abuse problems in the community. According to state trooper oversight reports, VPSO reports, informants, and reports from SKIAP, there has been a marked increase in such abuse. The problem was exacerbated by the resignation of all the SKIAP counselors in the village and the relapse of one of the abuse counselors who had been perceived as a role model because he had maintained sobriety for several years before that time. Once the SKIAP program collapsed, the problem seemed to escalate swiftly.

Many blame the increase in drug and alcohol abuse on the introduction of large sums of money into the community. Others blame it on the stress imposed by the spill. One individual pointed out that it was difficult for people to attend AA meetings because they were working 12 hours a day, 7 days a week. He also blamed, in part, the stress of being "dictated to" by the VECO managers, something which they are not use to experiencing.

According to mental health counselors in Homer and other service providers, residents have been seeking support services and are striving to reverse abuse. Moreover, a number of residents participated in the two-week workshop for recovery that was held in Port Graham during the spring of 1990.

Medical

The village medical clinic was severely affected by the events of the spill. One of the health aides resigned because the stress was too much. One health aide described the situation as "awful and too stressful . . . boats and planes were always bringing in patients." Because many small children were unsupervised there were more accident injuries that had to be treated. Cleanup crew workers suffered from skin rashes and burns, and the incidence of respiratory infections rose dramatically. The people working at the clinic were overwhelmed by the excessive demand for services. Moreover, the health aide reported that many people came to the clinic simply to seek reassurance for their fears, anxiety, and depression. A number of these patients reported fears about the uncertainty of the future and of suffering from chronic depression. The excessive demands on medical personnel in the village were compounded by the fact that the village doesn't have any EMTs or ETTs to assist the health aides. Other villages like Port Graham, for example, have approximately 25 EMTs. There are individuals that have some emergency medical training, but according to the Rim coordinator none of these people is certified.

Changes in Personal Experience

Many residents expressed disillusionment with the motives and efficacy of outside groups, whether public or private. Residents also seemed to be suffering from profound depression about the uncertainty of the ability to continue pursuing their subsistence activities and their commercial fishing activities. Furthermore, like the residents in the other Native villages, residents of English Bay had not received any confirmation or reassurance about the safety of edible food gathered from their environment. Many villagers perceive scientific experts as waffling on this issue leading the villagers to doubt the motives and expertise of the scientists.

THE PRINCE WILLIAM SOUND: REGIONAL OVERVIEW

For the purposes of this study, the Prince William Sound region encompasses five communities. These are the two home rule cities of Valdez and Cordova, the second class city of Whittier, and the villages of Chenega Bay and Tatitlek. The region covers an area of about 20,000 square miles of water, ice, and land. Valdez is the only community among these four to have road access to the rest of Alaska. All the communities are accessible by air or water and all have dock and harbor facilities.

The region has a bountiful supply of a variety of fish, shellfish, and marine mammals. To some degree all of these marine animals are an important part of the lifestyle of the people of the Prince William Sound region. In addition, the area is considered to be a unique pristine wilderness that is highly suited for outdoor recreation, adventure and travel.

The populations of four of these communities, in 1987, were as follows: Valdez/Outlying 3,384, Cordova/Outlying 2,870, Chenega Bay, 27, and Tatitlek 127. These figures were 1,693 persons greater than the 1980 federal census count of 5,627, which represents approximately a 4% annual growth rate. The city of Whittier had a population of 206 permanent residents in 1989.

The communities in the region depend on various economic activities although all communities rely significantly on their marine resources. Valdez's economy is largely dependent on the oil industry as it is the terminus of the Trans-Alaska Pipeline. However, commercial fishing and fish processing are also important industries. In contrast, the economy of Cordova is almost completely tied to the commercial fishing, principally salmon, industry. Residents of Whittier work in the public sector as city employees and for the state of Alaska as employees for the Alaska Railroad, as longshoremen, commercial fishermen, and there are a few private businesses. Most of those service the heavy tourist season in the summer. Chenega Bay and Tatitlek are both Native communities that do not have any industries as do Valdez, Cordova, and Whittier. The inhabitants of Chenega Bay and Tatitlek rely primarily on subsistence practices for their livelihood, although participating in subsistence is far more than an economic activity.

City of Valdez

Valdez is a seaside community located on an 800 foot deep channel in the Prince William Sound. The community is nestled among a steep snow-capped mountains yet it is also a vital port of entry into the interior of Alaska with a first-class, two-lane highway connecting it to Fairbanks, 365 miles north, and Anchorage, 305 miles east. In addition to the road, Valdez is accessible by the Alaska Marine Highway on a year-round basis and air travel by three different airlines as weather permits.

The population of Valdez fluctuates on a seasonal basis with an average of 3,000 residents during the winter months and 4,500 during the summer. Most of Valdez's residents are non-Native.

The City is the southern terminus of the Trans-Alaska Pipeline, which supplies about 20 percent of the nation's domestic oil. As such, a large part of Valdez's economy rests on this industry in terms of tax revenue and employment. However, Valdez is also home-port to a large commercial fishing fleet that harvests fin and shellfish in Prince William Sound. state, federal, and local government account for the largest share of employment in Valdez, followed by the transportation industry which includes employees at the Alyeska Marine Terminal.

Response Effort

Exposure to the Oil Spill

According to the city manager, in the first few days after the spill, "we were still not sure whether the oil [movement] or the winds could change or whatever, and the oil might come this way . . . whether we were going to be concerned with . . . defending the Narrows or trying to deal with . . . crude oil [coming] in our direction, but it became clear that that was not going to happen, after maybe the first couple of weeks . . ." According to the mayor at the time of the spill, "we were ground zero and I mean it was immediate and within a day, within 24 hours we had the most ungodly impact in our community."

Local Response Effort

Valdez saw a great deal of informal or volunteer response effort in addition to the official response effort described in greater detail below. The Prince William Sound Conservation Alliance (PWSCA), a volunteer group formally organized in September 1988, was the entity that acted as the formal coordinator for volunteer efforts. According to the director of the organization, it's major role was to "tell volunteers not to come [to Valdez]." The volunteer response center was funded by Exxon initially through the end of 1989, but extensions were

obtained at least through the first months of 1990. While PWSCA is a local group, it draws a significant number of members from other Prince William Sound communities and nationwide. PWSCA acted as the only information center on the spill, and this created strains on the volunteers who had to live "other lives" -- their "real" jobs -- particularly if those other jobs were themselves threatened by the spill. PWSCA also had help from other agencies, including Greenpeace, but there were fundamental problems with would-be volunteers that remained unsolved, including having no housing, no food, and no transportation for volunteers. According to the director of PWSCA, one of the biggest organizational difficulties was having the priorities of the Association ordered by others; the local membership did not feel in control, and perhaps 50% of the organization's staff time was spent responding to reporters and studies and not on actions to address the spill. Further, to the frustration of PWSCA a tremendous amount of time was spent on insurance and safety plan issues; the contract with the City alone was a 31-page document, and the organization was forced into a reactive rather than its normally proactive role. PWSCA obtained a winter (1989-90) cleanup contract with the city, and remained the local oil spill information office through the winter. Fundamental difficulties facing the organization also included moving from a non-profit private advocacy group to being expected to assume the role of a public agency.

Additional problems encountered by this volunteer group were:

- influx of innumerable outside experts with no local geographic knowledge
- staff members having to hold regular jobs and being needed as volunteers around the clock
- having no office space, no phones, no regular staff
- clogging of phone systems at various agencies; PWSCA was to act as the clearinghouse for would-be volunteer's calls
- untrained volunteers became part of the problem rather than a solution, unless they could fill a specified need -- typically they had no place to live, no money, and inadequate clothing.
- maintaining a list of volunteers and placing them as needed
- operating as a missing persons bureau -- anxious relatives called regarding missing persons and runaways hoping for information that the missing person had made their way to Valdez

In keeping with a PWSCA philosophy to act in the capacity of providing support services to the spill response, and that any volunteer response must comply with the same rules followed by **Exxon**, materials were developed and permission was obtained to mount a volunteer cleanup effort that lasted from mid-August through September 15, 1990.

Interaction with Outside Responders

The ex-mayor of Valdez characterized the difficulties in dealing with outside responders and the lack of lead time in the following way:

"You know, we talk about Exxon being arrogant, but there were lots of agencies that were arrogant. Those that thought, felt, they were saving us from ourselves; those that came in that 'had the answer.' . . . some of the state agencies were asking for variances on codes. That presented a major headache for us, because if we gave it to them what . . . were we going to do for everyone [else]? At any rate, dealing with each entity was frustrating because each one . . . thought they were the answer to the whole problem and the City initially started off trying to be very cooperative . . . In retrospect, had we had the time [like Seward] . . . I think Seward did a much better job than we did . . . Seward had weeks really to plan . . . [and see] what's Valdez and Cordova doing right and wrong . . ."

Exposure to the VECO/Exxon Cleanup Effort

According to city leaders, communication with Exxon was difficult the period immediately following the spill, but this was soon resolved. According to the city manager, after a chaotic initial period,

"Exxon was fairly accessible . . . [but] they had other things, bigger priorities to worry about that didn't involve the city, but they knew we were here, and that is what we were trying to transmit to them, that we were here and we wanted to assist . . . They made it clear we could get to them. They gave out phone numbers of people we should be trying to contact. My feeling really was not to bother them, to tell them once 'hey here we are, if you need us, here is my number,' but they were . . . concerned with getting the oil off the tanker, and the whole thing was going to hell in a handbasket with the storm that had come up, so they had lots of other problems."

The sentiment that Exxon had bigger problems was one that was not often heard in other communities, and would seem to indicate an understanding of the company and the situation developed by a long-term working relationship.

One of the primary frustrations in dealing with VECO/Exxon was a seemingly constant turnover in personnel. According to the mayor, there was the "aggravation of never dealing with the same person twice -- it became really, really frustrating."

Influx of Strangers

According to city leaders, the first crush was the media. There were hundreds of people calling for information, and the mayor acted as a spokesperson for the city. In the words of the city manager, "the first invasion was the media, of course, and all the hotel rooms . . . were taken by them . . . that was the first invasion of people sleeping in cars and needing access to the different things. So when that calmed down, then the city was really impacted when the [other] people started arriving and not having accommodations and putting demands on city services . . . Exxon [was] . . . hiring people faster than they could house them, and that created pressures on the city. I would say that day-to-day operations [of the City were] at least 60 or 70%, probably, consumed with oil spill stuff." When asked why the city did not hire special personnel to handle the oil spill related matters to free the administration to concentrate more on day-to-day operations, the city manager replied "in hindsight a lot of people asked 'well, why didn't you hire a special guy or do something'. . . but this thing just evolved so . . . gradually, and it's not like an earthquake or some other disaster where it just hits, this thing was an incremental disaster."

One city official described the problem with the influx of people in terms of the type of people who came to town to look for work. He attributed many of the social problems experienced to a process by which VECO would take the employable persons, and just leave the rest in town -- those were the ones who would cause difficulties, people without ties to the community and frustrated at the lack of employment, and there were simply too many of them to be assimilated into a community the size of Valdez.

Local Government

According to the city manager, the city experienced "incredible and almost indescribable burdens on City services. The maintenance of basic sanitation, safety, and health was the immediate problem during April, and as the oil spill response evolved with the population peaking at an estimated 11,000, the demands on the City changed.

Soon after the spill, it became obvious that the City of Valdez would incur significant expenses associated with spill and response effort. Action was taken to manage the financial ends of the city response through the creation a separate department within the city. This "paper department" was an entity through which to track revenues and expenditures.

Increased workload was felt within the city almost immediately after the spill. Initial demand included snow removal, crash fire rescue services, police services, and public works services. An agreeable arrangement for reimbursement was worked out with Exxon. The first billing was paid in full, and an additional \$100,000 requested to assist in helping with up-front costs was granted, and according to the finance director, "we were reimbursed on

a monthly basis for everything we put through." This lasted through August, when Exxon began to more carefully scrutinize billings. Since that period, again according to the finance director "two or three percent of our billings have been set aside." One expense that Exxon did not pay for was attorney fees, not wanting to potentially support legal action against itself. For the most part, the City did not submit legal fees for reimbursement (although these were a significant oil-related expense). Most of the set-aside billings are legal-related matters that the City feels clearly were necessary and unrelated to any potential for a lawsuit against Exxon, and City staff feel that given enough time, these probably will be paid by Exxon. Of the \$1,393,202 that was billed during 1989, \$1,379,056 was paid by year's end (98.9% of claims), and an additional \$842,142 in capital projects for the city were funded by Exxon.

No staff members were added to the financial department, but the workload increased considerably. According to the finance director, everyone in the department was extremely busy, and "our accounts receivable clerk was almost overwhelmed with the number of additional hookups to water and sewage. . . especially at the small boat harbor."

According to one department head, whose comments were representative of several others, it was "a matter of deferring a lot of the stuff that you normally have to do. . . we had to do a lot of that, we didn't try to put in extra hours if we could get away with it, because we don't have a budget to handle that . . . some things fell through the cracks . . . [for example] we didn't get our monthly grant reports on time." While planning functions slipped in most departments, one of the departments frequently mentioned that had things "put on hold" was the Planning Department itself. The Comprehensive Development Plan was not completed as scheduled, the comprehensive flood mitigation program was not prepared as scheduled, and municipal land selection entitlements were not completed. According to the city manager, "In many ways we sort of lost the year, in doing things like our comprehensive plan, and things like that, I think, are necessary for the overall development of the city."

According to the finance director, it was clear that there were, "some indirect costs somewhere in there that we didn't recover without a doubt, but it's hard to put your thumb on it . . ." One type of cost that was not as obvious as some others was the absorption of "comp time" in the period following the spill and clean-up. Employees who built up "comp time" instead of overtime took that time off when things got slow, which meant that specific areas were functioning below full staffing for those times. For some salaried individuals, such as department heads, there was no compensation. According to one administrator, "if you went and had to hire a new person, or you had to pay overtime, that would be fine" but salaried people are not technically eligible for overtime. According to this administrator, there was a strong feeling that the city council did not want to set a precedent for paying overtime for salaried city workers, no matter who would be paying the tab in this particular instance. Clearly, however, there was a cost to the city of salaried persons such as department heads not being able to do their regular jobs. Regular tasks were not performed that save the city money in the long run. According to the director of public works, very

little of the routine maintenance that is schedule for the summer could be accomplished. Roads were not cleaned, repaired, and lines repainted, snow removal machinery was not overhauled, and so on. It is anticipated that this will result in some costs down the line, both in terms of additional work load in the future, and in terms of accelerated wear caused by less than optimal maintenance.

Hiring new persons for City jobs presented its own problems. According to the city manager, hiring new employees is "not always a great thing, because there is training involved, and you have somebody here now who is a representative of the City, and if they screw up, you could get a million dollar lawsuit . . . hiring new people . . . seems simple enough, but there is a lot more to it than that. Trying to make that person feel committed to the city, to do a good job for the city . . . there is a down side to just picking someone off the streets and [making them] . . . a city employee . . . he can make a mistake."

One department that experienced sustained impact over the course of the cleanup was the Department of Emergency Services, in large part because they were responsible for the crash fire rescue services at the airport. The tremendous increase in activity at the airport necessitated crash fire rescue services far and above normal demand. This came on top of increases in activity due to the increased number of people in town. At the time of the spill, Valdez had a Department of Emergency Services that combined the functions of fire services, emergency medical services, and law enforcement services into a single department. In other words, the same people who had to handle the increased crash fire rescue demand at the airport also had to handle the increased demand for law enforcement services in a community that more than doubled and perhaps tripled in population at the peak of the cleanup. Increased demand was also felt in the harbor, and in the recreation department. The recreation department, because of its overview of the parks and campgrounds, was also hit early by the influx of people into Valdez. The library also experienced significant demands.

The only department that appeared to be anticipating sustained impacts into the summer of 1990 was the harbor. It was expected that the harbor would have an increased amount of traffic, but additional staff hiring was not planned. Demands on departments may be summarized (from information provided by the city manager and individual departments) as follows:

Administration/City Clerk/Finance had to address operational, governmental, liaison, media, negotiation, and managerial demands over a seven month crisis period. Information demand from inside and outside the city was very high. Hundreds of letters and packages containing everything from messages of sympathy and blame to destroyed Exxon credit cards and suggestions (and products) for cleaning up oil had to be answered; the city had to provide space, security, and people to Exxon initially; the press demanded phone and power service; hundreds of calls were handled regarding establishing residency (to qualify for local

hire); and the staff was forced to a large extent to react to the situation and "put out fires" rather than plan a response. The clerk's office was still "far behind" in filing and paperwork as of the spring of 1990, as "people became a priority" rather than keeping up with paperwork during the crisis.

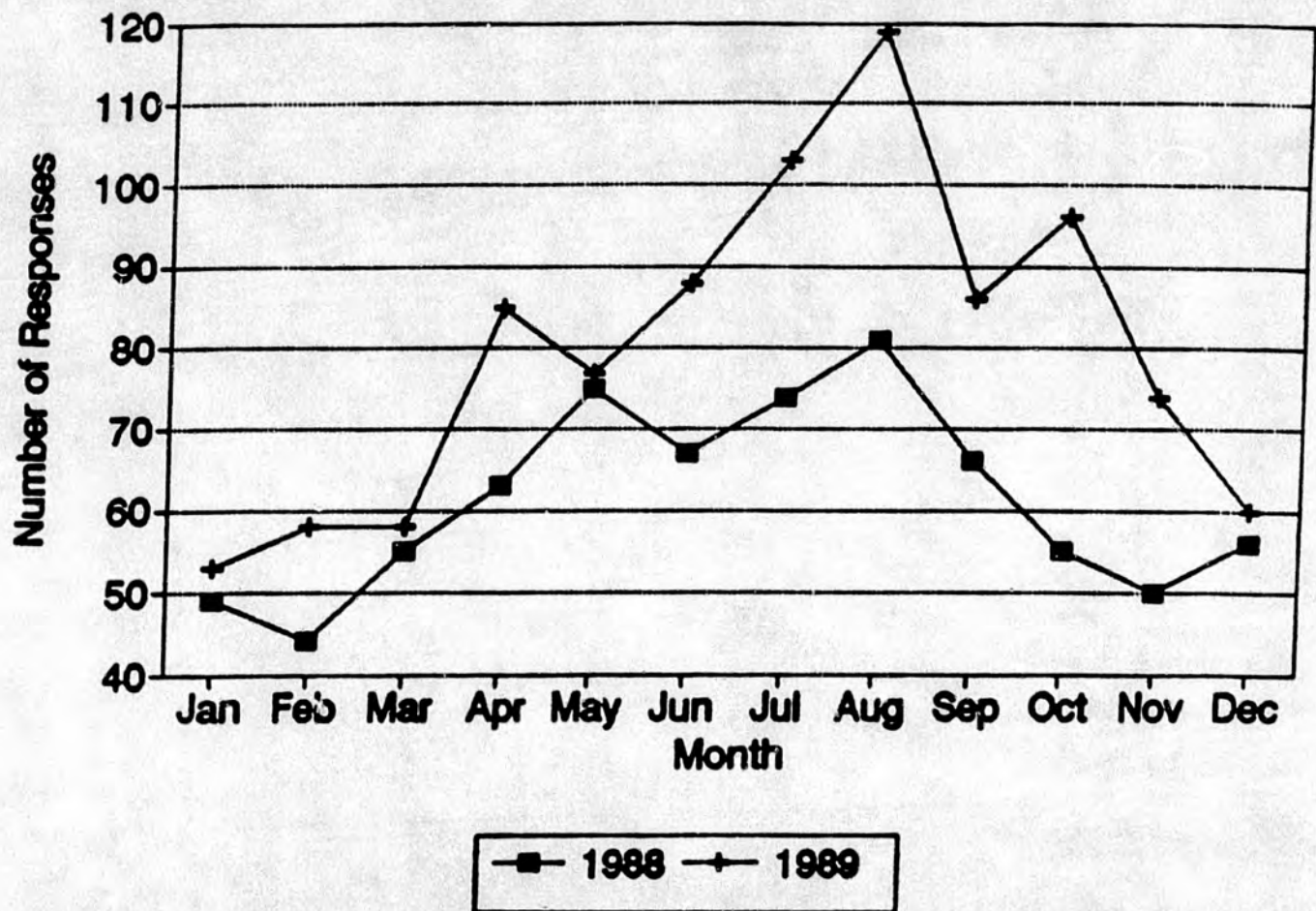
Public Safety during the period was undergoing a transition from a combined department to separate fire and police departments. Activity levels jumped dramatically for police, fire, and EMS services. These statistics are presented below: public safety statistics appear in the section on crime; fire and EMS statistics appear in the section on health. In order to keep up with increased demand on officer's time, three additional community service officers were hired to help with the workload caused by parking, camping, and animal control enforcement. The hiring of additional full-fledged peace officers was not deemed in the best interests of the city; Exxon provided between \$40,000 and \$50,000 worth of equipment to help with strained department resources. To help with coordination, weekly security meetings were held between public safety, the Coast Guard, Alyeska, the State Troopers, the Airport Police, and Exxon, although Exxon did not actively participate after the first few meetings. Being a full department of public safety, law enforcement was stretched thin by the needs that were brought about by demand on the fire and emergency medical aspects of the department. Requests for medical assistance were very heavy during the early part of the spill before a coordinated medical response system was organized; crash fire rescue demands at the airport drew off personnel as well. Effects of the spill were still evident on the system in January 1990; \$8,000 of the \$20,000 police overtime budget for the year was used in one month alone primarily due to the court time from the increased case load. It is also important to note that police statistics do not reflect the entire range of social disturbances -- significant numbers of persons were not arrested for relatively minor incidents simply because there was no way to house them in the jail facility.

In his annual report to the City of Valdez, the animal control officer stressed that activity in his department increased substantially. Many Alaskans who came to Valdez to work on the cleanup allegedly brought their pets, typically unvaccinated, with them. These pets were infrequently on leashes and could be found roaming the streets of the city and often needed to be picked up. Although the Animal Control department did not provide data on the number of animal complaints or pick-ups for years prior to 1989, the Police Department did retain a record of animal calls. A comparison of such calls for 1988 and 1989 appear on the following graph.

In addition animal call responses, the Animal Control department had to deal with increased numbers of animal cremations. The animals brought to the department were found by oil cleanup workers and considered to have died a "natural" death. (Those animals who died as a result of the oil spill were taken elsewhere.) However, because of the increasing numbers of dead animals found and the consequent strain on department resources, an Exxon representative to the animal control department arranged for the animals to be incinerated elsewhere.

Valdez Police Dept. Officer Response

Animal Calls, 1988-1989



Library/Museum activity was mixed. Library activity was up dramatically, and may be gauged by the issuance of 1,488 new library cards during 1989, topping the old record of 795 cards issued during 1981 (an increase of 87.2%). The library also set a new gate count record for the year, exceeding the old count by over 4,950. One key area of impact, one that is not quantitatively tracked, is the number of requests for information received by the library. There was a tremendous volume of requests during the spill summer, with newspaper reporters having a major impact early, and requests for scientific resources having an impact later on. The museum activity, like tourist activity in the community in general, was down for the year. Reductions were significant in both patron counts and donations. Donations in 1989 fell to \$13,539.50 from \$17,762.23 in 1988. A guest count for the museum is presented in the following table.

The Valdez Museum Guest Count					
Month	1986	1987	1988	1989	Change 1988-1989
January	121	60	closed	closed	NA
February	69	194	closed	closed	NA
March	145	860	348	108	<240>
April	390	380	424	577	153
May	2139	2360	2346	1940	<406>
June	7507	6805	5670	5670	<2,262>
July	12726	1275	7849	7849	<4,654>
August	10134	1227	5546	5546	<4,727>
September	2899	2369	3107	2146	<961>
October	415	270	305	closed	<305>
November	264	295	247	81	166
December	76	213	208	266	58
Total	37,062	38,836	37,693	24,183	<13,510>

Source: Valdez Museum Records

The museum attendance records may be taken as an indicator of tourism in general in Valdez during 1989. How such a dramatic drop-off during 1989 will influence tourism in subsequent years is a matter of much discussion in the community.

Engineering/Community Development/Utilities activities were significantly impacted by spill-related demands. Engineering impacts included building code enforcement, mobile home installation, building permit requests, sewer treatment plant operations, and water demand. Residential and commercial construction permits issued more than doubled between 1988 and 1989 (104 and 217 respectively). The community development department was hampered by new businesses, itinerant merchants, zoning questions, temporary structures, land leases, land use permits, a myriad of issues presented by a rapidly growing population, and the need to coordinate with state and federal agencies on a wide range of subjects. The community development department was involved in tracking the population increase over the summer months, resulting in a DCRA certified population of 7,193 for 1989, approximately double the normal population for the community. It is estimated by the city government that this will result in an approximate 45% increase in state aid monies (an additional \$450,000), at least for the short term. There were several projects that were slated to be completed by the planning department that would have required public input; these were tabled for the year due to the fact that there was no way possible to collect such input.

Key aspects of city infrastructure was strained during the spill period. Both water and sewer capacities were strained during the summer; the limits of the sewer system were exceeded by the additional demand, and the system required remedial repairs. Water demand may be characterized by millions of gallons per day (MGD). Increased activity averaged .5 MGD over base levels; peak demands were much higher over 1989 figures. In potable water usage, the 1989 peak flow was 3.6 MGD; the previous peak flow was 2.5 MGD. Peak flows consistently exceeded the 3.2 MGD ceilings. Figures for in-town usage over a four year period are presented in the following table.

Valdez Potable Water Usage In-Town Usage				
Quarter	1986	1987	1988	1989
1st Quarter	1.4	1.3	1.1	1.8
2nd Quarter	1.4	1.4	1.6	2.1
3rd Quarter	1.3	1.9	1.6	2.1
4th Quarter	1.4	1.3	1.3	1.3
Total Yearly Average/Day	1.4	1.5	1.4	1.8

Source: City of Valdez

During the spill period, the Loop Road water system was heavily used to supply ships and local camps via the Container Terminal distribution system and tanker trucks. Figures for the Loop system are shown in the following table; the South Central and Robe River systems were both affected by oil spill demand, but to a lesser degree than either the in-town or the Loop Road systems.

Valdez Potable Water Usage Loop Road System Usage				
Quarter	1986	1987	1988	1989
1st Quarter	.017	.011	.028	.019
2nd Quarter	.027	.024	.023	.046
3rd Quarter	.026	.021	.019	.079
4th Quarter	.020	.012	.017	.059
Total Yearly Average/Day	.023	.017	.022	.051

Source: City of Valdez

Sewage treatment facilities were also overloaded at this time; signs of the overloading appeared in May 1989, and operations at the plant were not adequate again until the middle of August. The following table presents loading figures for 1988 and 1989.

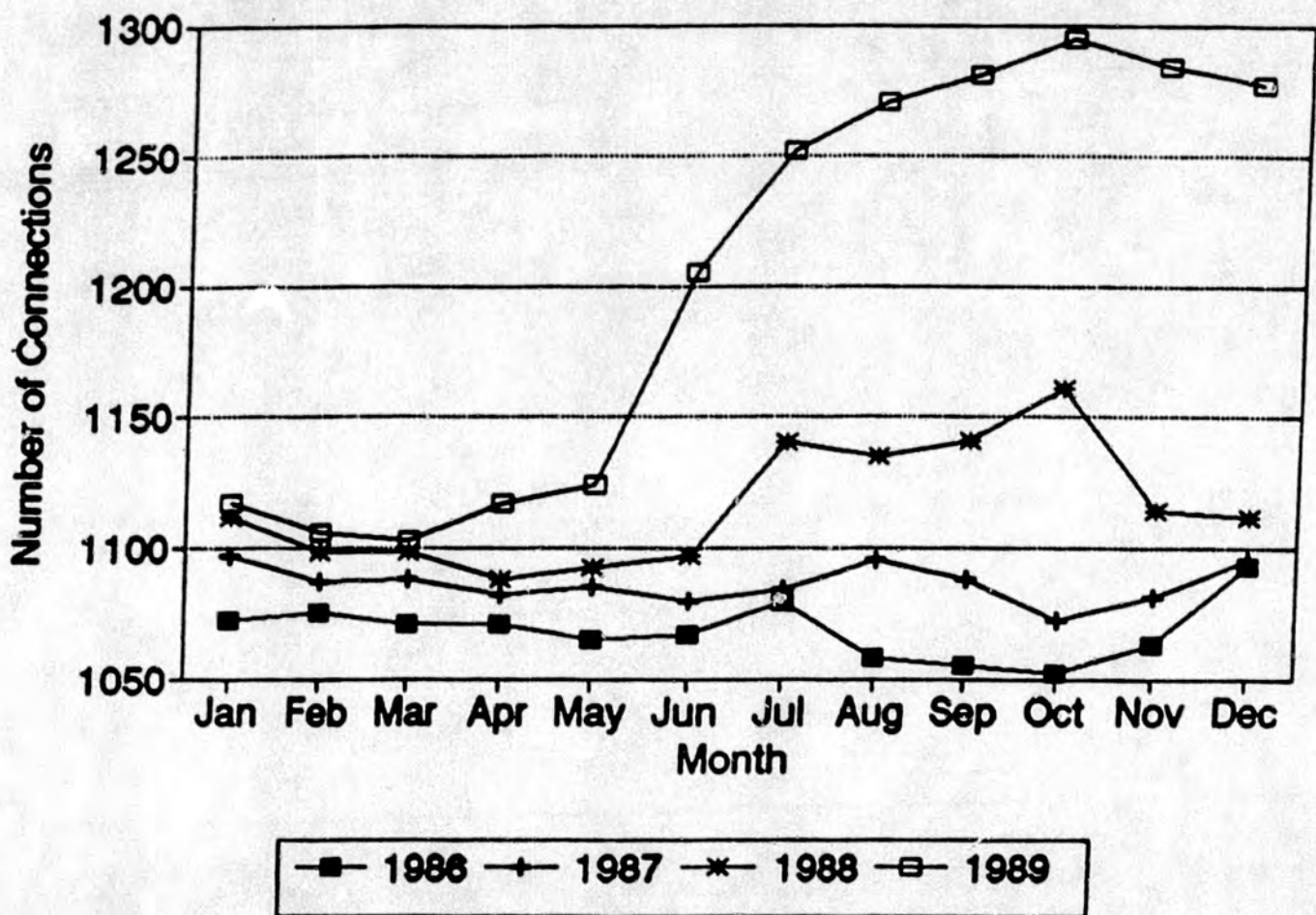
Month	Hydraulic Loading Million Gallons per Day			Solids Loading Pounds per Day		
	1988	1989	% Increase 1988-89	1988	1989	% Increase 1988-89
April	.550	.810	47.3%	367	980	167.0%
May		.830	23.9%	525	1,322	151.8%
June		.750	53.1%	417	1,532	267.4%
July		.690	41.0%	699	1,266	81.1%
August		.600	0.0%	676	1,006	48.8%
September	.610	.900	49.3%	930	1,208	29.9%

Source: Valdez City Manager's Office

Copper Valley Electric Company, while not a local government department, was a utilities department that experienced increased demand for services over the prior three years. As seen by comparing the following two graphs, the large majority of the total connections for 1989 were for private residences. This data could indicate that the many of the people who came into Valdez following the oil spill were accommodated by annexes to pre-existing residences.

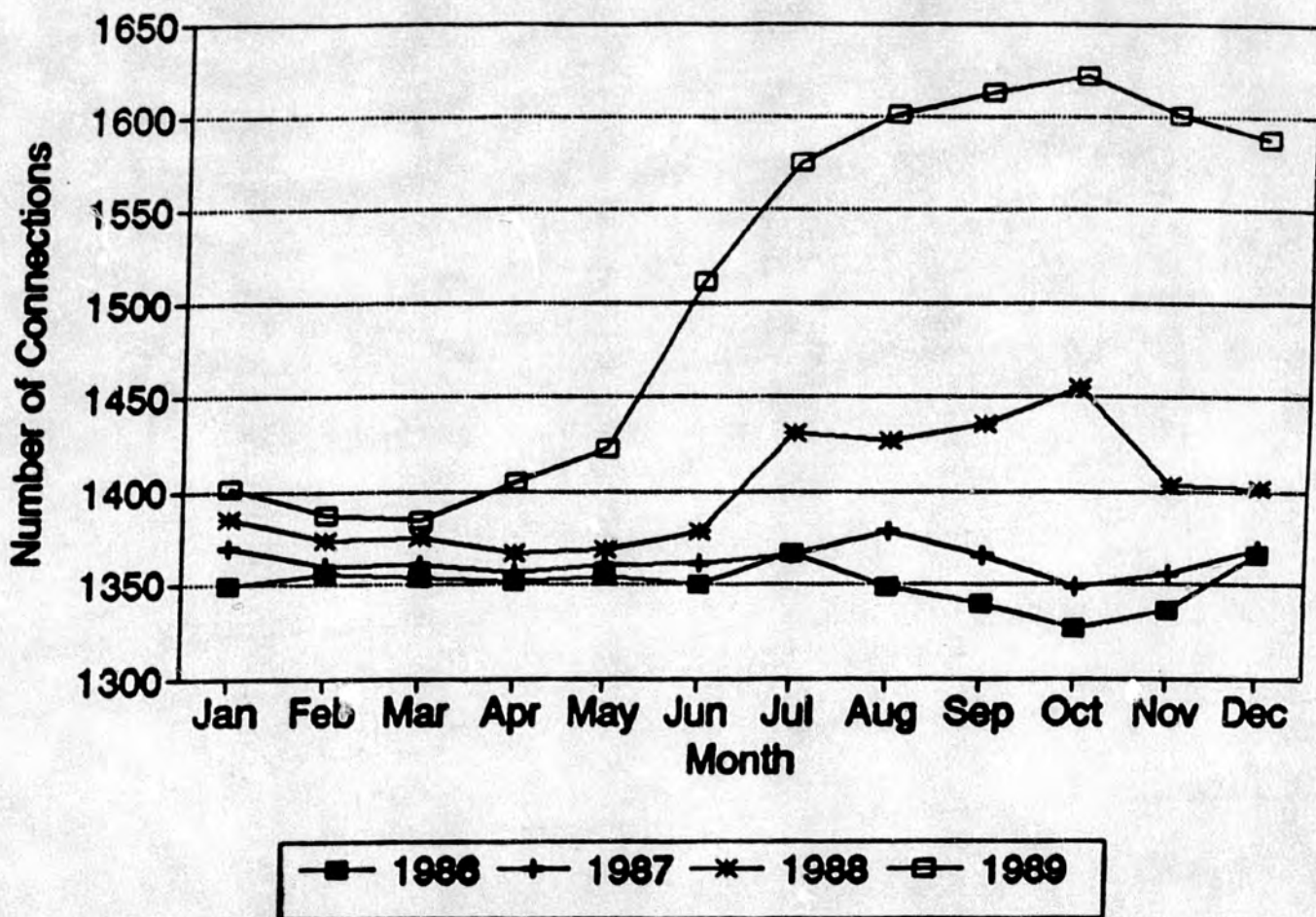
Copper Valley Electric

Valdez Residential Concntrs, 1986-1989



Copper Valley Electric

Valdez Total Connections, 1986-1989

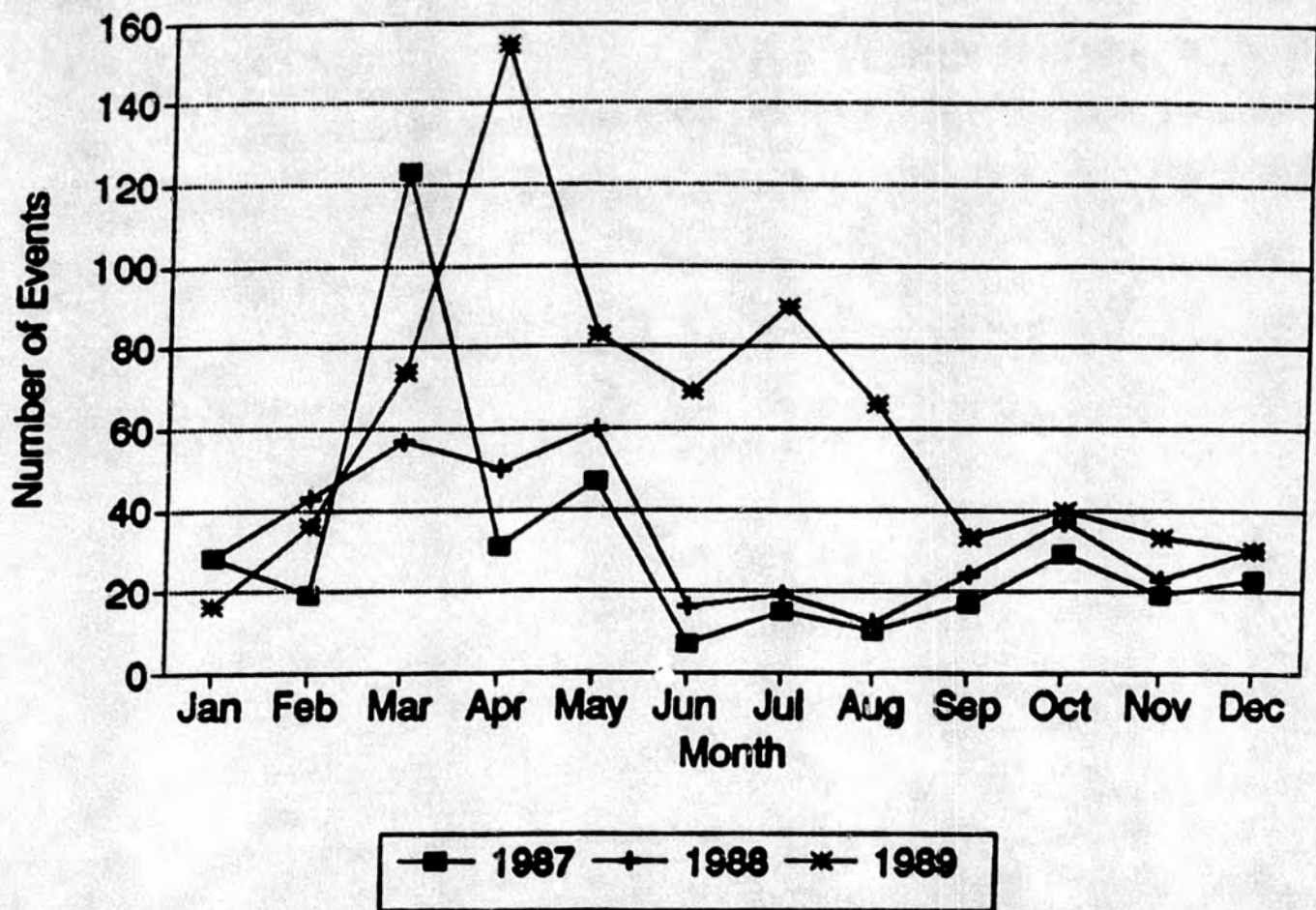


Parks and Recreation department was burdened with an especially heavy demand on its normal services due to the increase in the population associated with the oil spill. In addition, the department (along with public works, engineering, and community development) was responsible for establishing temporary campgrounds with showers and toilets to handle the surge of transient oil spill workers. The department was also extended its summer child recreation/supervision programs in response to increased demand. The Civic Center, in particular, was a locus of oil spill activity, from being the site of early conferences for the international press to a later congressional hearing. Scientific meetings were held daily throughout the period. The following table and figure illustrate the increase in activity at the Civic Center. According to one staff member, use during the summer ran from 7:30 in the morning until midnight "just about every night."

Valdez Civic Center Activity Levels, 1988 - 1989			
Activity	1988	1989	1988-1989 % Increase
Events	398	725	82.2%
Attendance	26,699	47,804	79.0%
Rental Revenues	\$14,227	\$54,134	280.5%
Catering Revenues	\$8,855	\$10,050	13.5%
Movie Revenues	\$0	\$8,340	--
Total Revenues	\$23,082	\$72,524	214.2%

Source: Valdez City Manager's Office

Valdez Civic Center Number of Events, 1987-1989



Counseling Center/Hospital activities were significantly affected by the oil spill. Increased caseloads led to obtaining an increase in state grants to hire an additional counselor and a secretary at the Counseling Center. Counseling center statistical information is presented in the section on mental health, below.

Public Works Department was involved in oil spill response in a number of ways. This included providing assistance with the temporary campgrounds, providing water and sewer services under conditions of unprecedented demand, managed the collection and disposal of solid waste four to five times the normal volume, and various support services. No normal maintenance was performed on the city streets during the summer of 1989 -- sweeping, painting, washing, sealing and repair -- which is anticipated to double work load in 1990 when it can be done. Building maintenance needs increased dramatically with the wear and tear on buildings created by the crowded conditions, but again no routine or preventative maintenance was able to be performed. Wear and tear on other aspects of the public works/infrastructure system are hard to quantify, such as the need to overhaul a number of fire hydrants that were damaged when used as water supply, and so on. According to the director of public works, five to six years worth of landfill space was used during 1989, exceeding the permitted area. Routine maintenance was not performed on vehicles, particularly on snow removal equipment that is normally maintained during the summer, so the city fell behind on that, and older vehicles experienced a disproportionate number of problems. Routine maintenance was not performed on the sewer system, and that caused problems during the winter following the spill. According to the director, during the summer of 1989 "everyone had an emergency" and the department was seen as a source of information and parts for Exxon, VECO, and Norcon. This created a considerable strain as it seemed that these three were not communicating with each other, so there were a large number of redundant requests, "as if they were almost competing with each other."

Ports/Harbor was the area of city operations that was probably most directly and immediately impacted by the oil spill, through the ports, docks, harbor, and airport. The Valdez Container Terminal was shared with Exxon and its subcontractors as a "staging area, storage space, and flexible dock facilities to support the armada of barges, ships, flotels, and boats used to clean up oil and support the effort." According to one staff member, activity at the container terminal increases a hundred fold over normal levels. The harbor operated at extended hours during the summer; it acted as a "nerve center" for the cleanup operations as a dispatch center for crews and vessels. According to port statistics, transient mooring agreements for the years 1987 and 1988 combined totalled 834; 1989 alone saw a total of 850 agreements. Boat lifts went from 385 in 1988 to 674 in 1989, and increase of 75.1%. The airport was heavily impacted as flight loads increased by a whopping 2400%, from a normal 12 flights per day to an average exceeding 300 operations per day. At one time a

staff member counted a total of 30 helicopters on the ground. Eventually a crew was brought down from Elmendorf AFB to help with the load.

Changes in the Political Context

One of the casualties of the spill was efficient communications within the city government. According to the city manager, one of the "things that suffered was [my] regular . . . communication with the city council people, and they sort of let me know that they thought they were being ignored and, again in hindsight, that probably . . . should have been the one thing that . . . I should have done more of."

Communications with other jurisdictions would have been desired, but were not possible at the time. According to the city manager, "I don't know what's happening in other places . . . it would have been nice . . . to have been able to go to Seward and Cordova and some other places to see what was happening over there, but we really didn't do that . . . we were sort of . . . [overwhelmed] . . . here, and in the other communities . . . while they were being impacted by the spill, and some of them were actually having oil hit their beaches, they were not hammered as much as we were, and they had more time to go to these meetings and go back to Washington, D.C. to lobby for oil spill legislation . . . we were a little bit behind the curve on that."

Political change as a result of the oil spill was evident in Valdez. The mayor at the time of spill has since moved on to other political arenas. According to one city official, "I think it has divided the community a little bit . . . Valdez has always been thought of as pro-development for oil and all that, but you know we can't speak too disparagingly of the oil and gas industry, because it's so important to the community, so much of our tax base. And we have an environmental community . . . before they were more subtle, but now they are more visible . . . it puts the city administration in the middle . . . Alyeska and some of their folks want to become more involved in the city now . . ." At the time of field research, two Alyeska employees were on the city council. Prior to the previous election, one of the two had announced that he was not going to run for reelection; at the last moment he ended up filing for reelection and retained his seat. According to one city leader, "I think that the company [Alyeska] wanted him to remain on the council, and he basically said as much."

According to several sources in other communities, fishing communities, people were pretty well united. Valdez, being an oil and gas community, had a very difficult political situation. According to one official, in Valdez "you have a road [connected], but fairly isolated little town here in Alaska, with magnificent scenery and a lot of attraction there, but it's a pretty concentrated industrial site as well, with 20 to 25% of the nation's oil being pumped through this port, and trying to weigh the whole environmental and developmental issue. I mean it gets boiled down right here in Valdez . . . it's a microcosm of a lot of different things, it's a microcosm of the state, the fact that we are depending on the oil well, we are trying to

do other things to diversify our economy by using this one-time well. And in some ways on the whole issue of development versus environmental preservation . . . the rubber meets the road in Valdez."

One major shift in the operations of the government of Valdez was the change in the role of the mayor in the operations of the City. In an emergency situation the role of the mayor assumes greater importance than is otherwise the case, and staff support of mayoral functions increases as well.

Changes in Community

Community Overwhelmed

The city manager's 1989 Annual Report to the Valdez City Council describes how the year changed for the city with the grounding of the *Exxon Valdez* and the subsequent oil spill and the "media feeding frenzy; wildlife cleaning; invasion of all fashion of laborer, vendor, bureaucrat, scientist, dignitary, fast-buck artist, social scientist, EXXON/VECO/NORCON executive, etc. The City was in the middle of a world class 'Chinese fire drill' . . ." As noted elsewhere, the tide of media and workers combined with the housing shortage made the community seem overwhelmed to many residents.

As one community leader summed up the problem, Valdez is normally a "town of 3,000. Now, all of a sudden, you got 11,000 or 12,000 people, [but] you've still got the same amount of grocery stores, you've still got the same amount of restaurants, you've still got the same amount of bars, so where do you put all of the extra people? . . . then even the locals get tired of waiting in lines. . . you get tired of waiting at the post office, and you get tired of not being able to go to your favorite bar and have a drink because all the spill workers are in, or whatever . . . that creates a little bit of a problem . . ."

Estimates drawn from a housing structure survey done by the City in February 1990 indicate that there were approximately 4,000 people still in Valdez, an increase of several hundred residents. Much of that increase is attributed to two factors. First is the new escort vessel policy that created approximately 109 new jobs in the community; the other is the fact that otherwise transient residents stayed over the winter in hopes of qualifying as residents for preferential hire for whatever activities would take place in the summer of 1990.

One can get an idea of the magnitude of transient influx from camping statistics. In the summer of 1989, there were approximately 100 camping spaces in Valdez for transient workers (this does not include the Glacier Creek campground which is designated for tourists staying 14 days or less). Further, the primary site for 1989, Dock Point, consisting of approximately 60 spaces was not available in 1990 due to environmental and zoning concerns. Several campsite counts were made during the summer of 1989. Data collected

on May 17 and 19 indicated 516 units in approximately 10 different locations. These units consisted of 142 tents, 158 trailers, and 216 motorized units. Another count was taken on May 30 outside of the downtown area: 297 units were counted in an area that had contained 216 on May 17 and 19 -- an increase of 81 units in just over a week. Of the sum total, approximately 200 units were in the city's two private campgrounds -- which left another 400 or so units in unauthorized areas or areas not yet finalized for camping. This total exceeded by 200 or so the capacity of areas planned as designated sites; this situation was alleviated somewhat with Exxon's decision to move site of hire to Anchorage, but people still came to Valdez looking for employment. This crush of oil spill related campers, obviously, made the accommodation of "regular" seasonal workers all the more problematic.

Change in Social Relations

According to community leaders, the oil spill was a very divisive issue in Valdez. According to a community leader, being an oil and gas based community, the community had to walk a fine line of indignation at what the oil companies had done, versus their efforts to clean it up -- for better or worse, the nation needs oil. Further, oil and gas industries are important to the state, so the community had to really try to have a balanced view of things.

According to one city official, "economically, of course, I think there were a lot of businesses that were really borderline, that may have been about to go under, that got saved by this thing [the spill]. It provided a shot in the arm . . . it led to a lot of improvements in some of the businesses around town. But again, it kind of knocked us off our game I think in some ways, and I think that we are going to have to rebuild our business industry, our careerism. I would have to say that some of the things, and some of the businesses did, they had to had to have made their own choices, but they were in my mind fairly short sighted, and that they provided accommodations maybe for oil spill related people, and canceled out tour groups and other things like that, so . . . to the extent that we are going to have to try to work hard to bring that back, [that] will be a challenge."

Crime

Activity levels of the police department, as discussed previously, were up considerably as a result of the activity associated with the oil spill. Summary statistics are provided in the following table. Statistics are presented for the years 1988 and 1989, along with a percentage increase comparison of those two years. Comparable statistics for the year 1976 are presented as well. 1976 is considered a benchmark year for law enforcement in the community, as that year was at the peak of the "pipeline days." While all categories presented increased from 1988 to 1989, it may be noted that in some categories law enforcement demand of the spill cleanup boom exceeded that of the pipeline boom days, in other categories it did not.

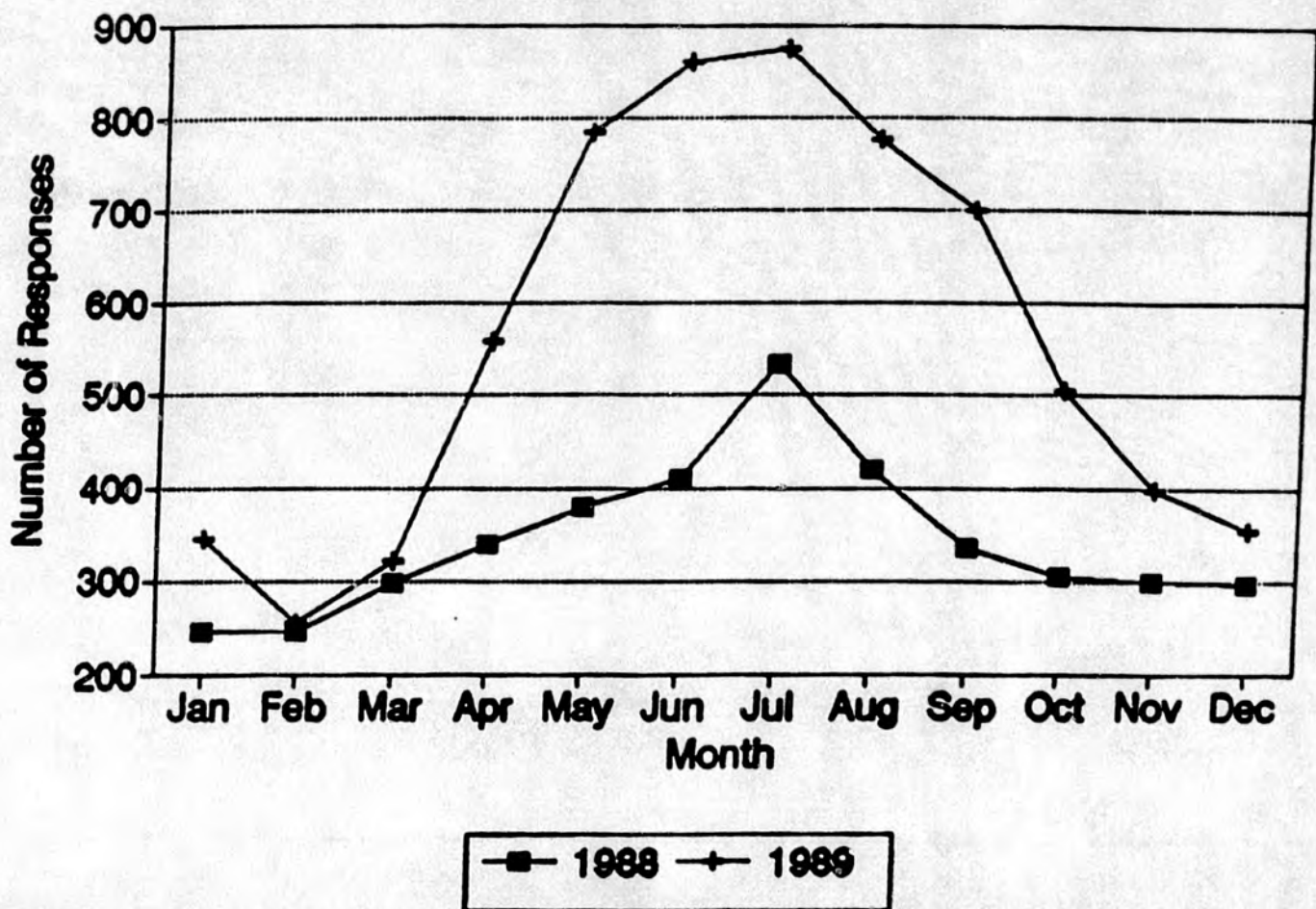
Valdez Police Department Crime and Officer Statistics 1976, 1988, and 1989 Compared				
Activity	1976	1988	1989	1988-89 % Increase
Assaults	96	34	58	70.6%
Accidents	469	112	298	166.1%
Bar Disturbances	205	56	130	132.1%
Disturbances	54	149	359	140.9%
Driving While Intoxicated	NA	76	153	101.3%
Man-Days in Jail	520	1,845	2,660	44.2%
Traffic Tickets	1,079	200	456	128.0%
Arrests	346	301	673	123.6%
Officer Responses	4,762	4,111	6,734	63.8%

Source: Valdez City Manager's Office

Following are selected figures from the above table which graphically illustrate the dramatic increases in crimes. All of the figures are based on the number of police responses in a particular category. The figures on actual charges appear in the figures from the Valdez Superior Court. It is clear from these figures that crimes involving substance abuse significantly increased over 1988. Such findings are corroborated by reports from the Valdez Mental Health Clinic which treats Alcohol Safety Action Program (ASAP) clients.

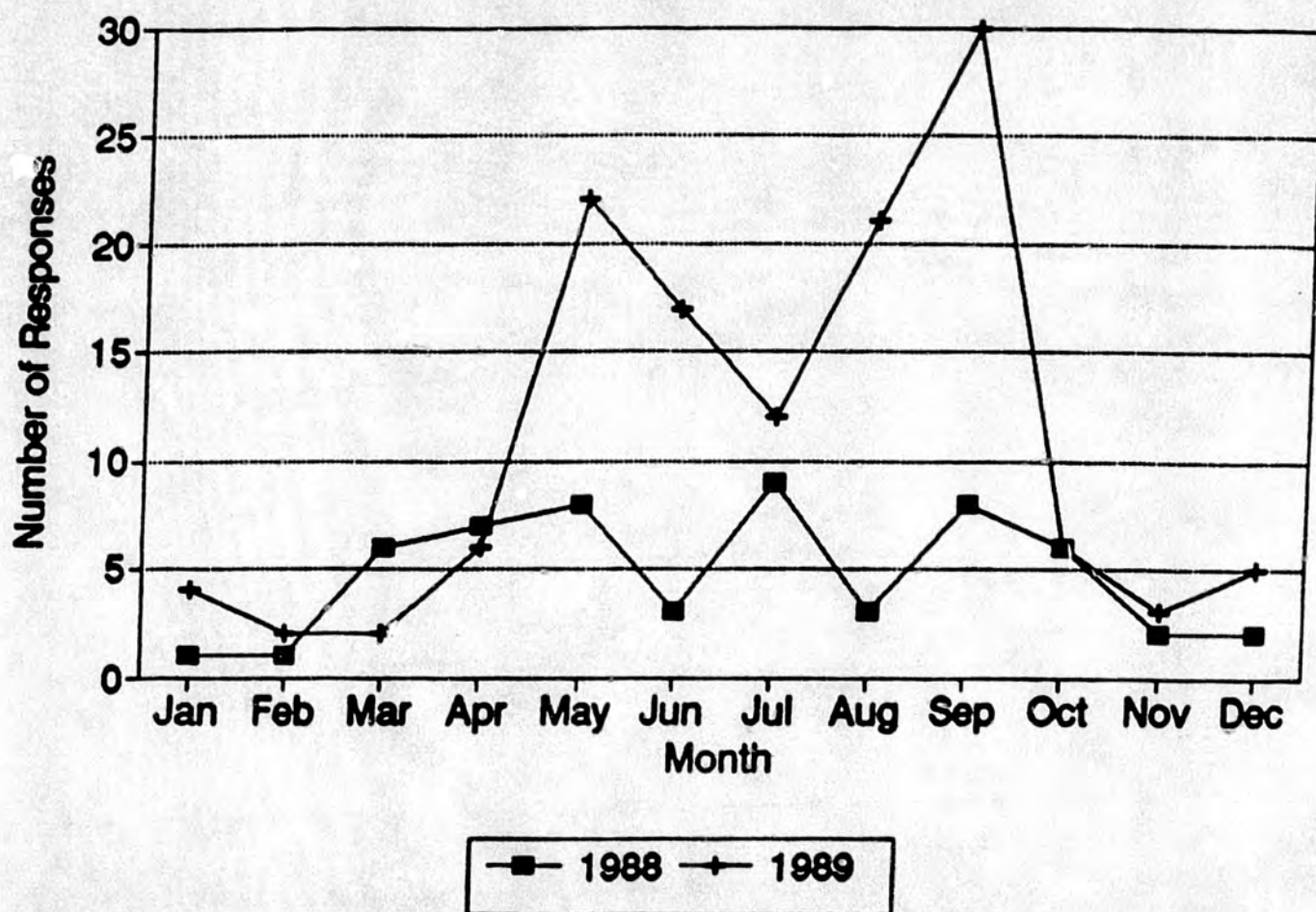
Valdez Police Dept. Officer Response

Total Police Responses, 1988-1989



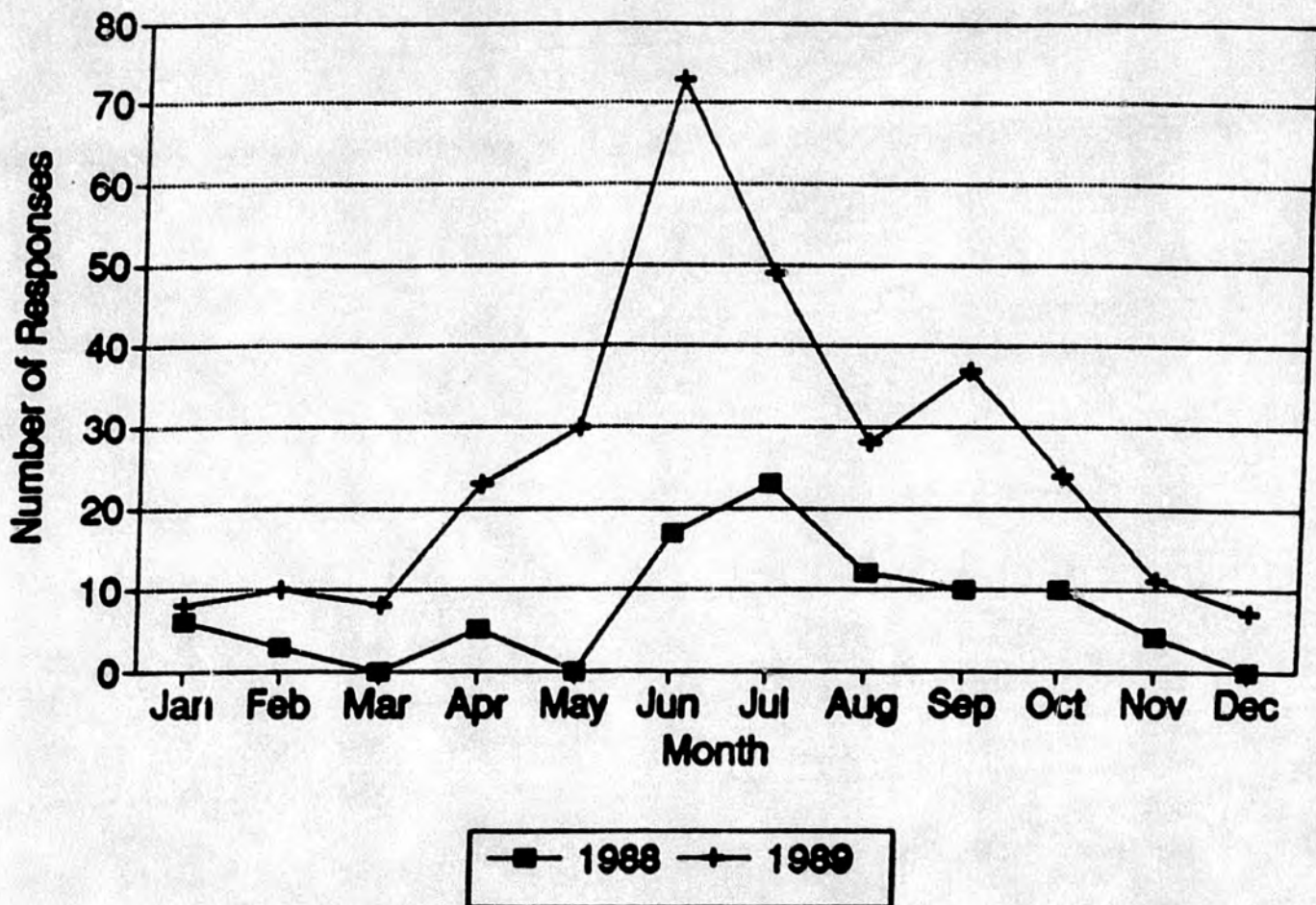
Valdez Police Dept. Officer Response

Bar Disturbances, 1988-1989

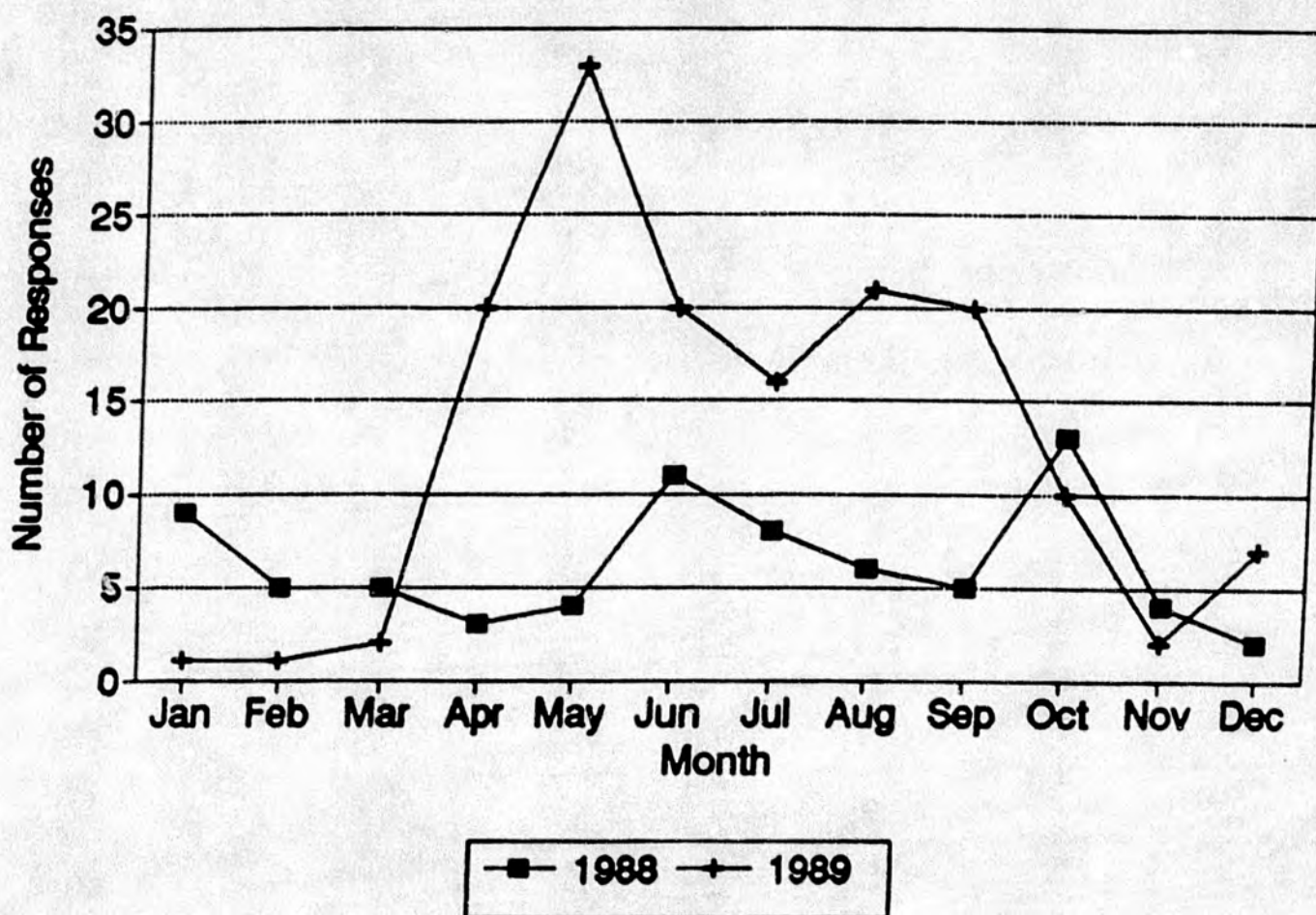


Valdez Police Dept. Officer Response

Disturbances, 1988-1989

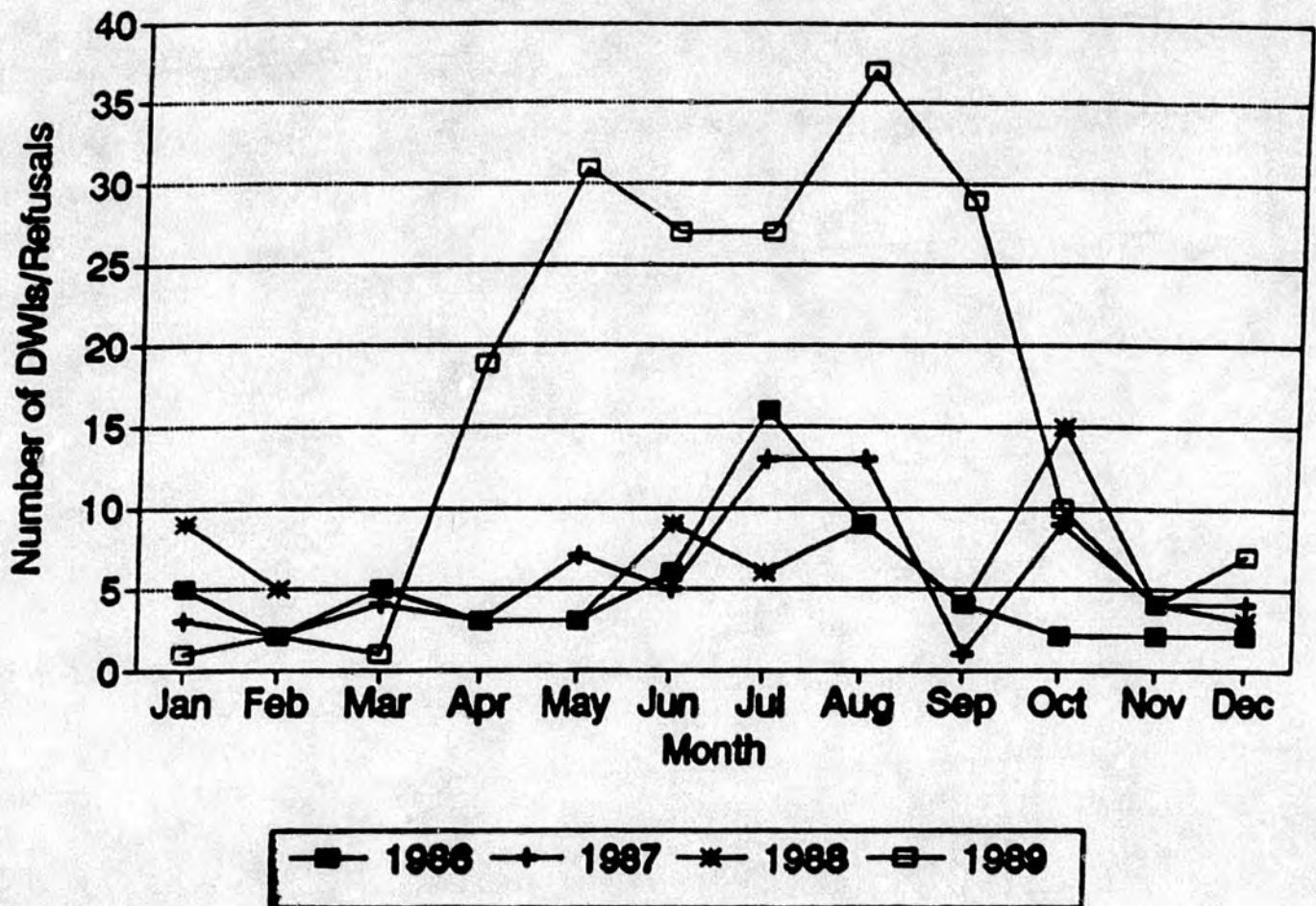


Valdez Police Dept. Officer Response DWIs, 1988-1989



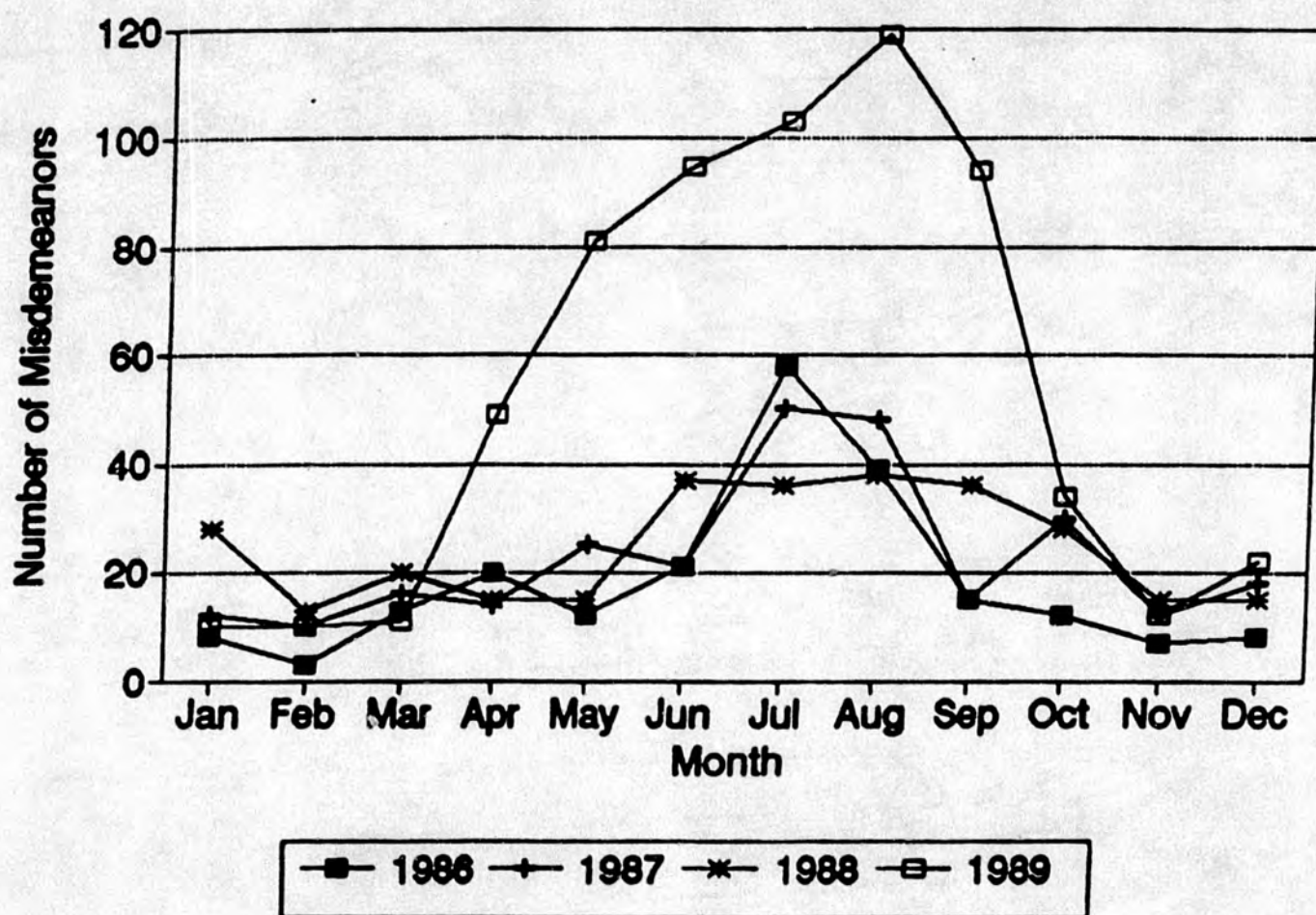
Valdez Superior Court, 1986-1989

Number of DWIs/Refusals



Valdez Superior Court, 1986-1989

Number of Misdemeanors



There were other causes of increased work load on the legal system in Valdez in addition to increased crime. There were a significant number of persons who came to Valdez looking for work who had outstanding warrants elsewhere; when these people were arrested in Valdez their statistical tracking goes to the jurisdiction within which the original warrant was issued. According to the magistrate's office, this increase in work load was significant, but does not show up in local statistics. At times during the summer, according to the magistrate's office, there sometimes ten arraignments per day, whereas a previously normal figure would have been two per day. The court system was clogged, and according to staff, it was frustrating trying to serve the public while being "overrun."

During the winter of 1989-90, the effects of the spill were still being felt on the local legal system. In March 1990, the jail count was still running at 6.6 persons per day, up from an average of 4.6 the previous year. At the height of activity after one drug sweep there were 22 persons in a 16 person jail, so they were forced to "hot sheet" prisoners for a period. Two extra jailers were funded by Exxon for the peak period. According to the police chief, although Exxon was very responsive to requests for additional personnel and equipment, "no matter how you do it, there are still hidden costs that you never think about that come up later, so, we got stuck with all that too. . ."

Additional help was requested of the State Troopers, because in the words of the police chief, "we just got so big so fast." There were problems with the imbalance of a limited number of resources and expanding criminal problems: in the words of a senior staff member "when we finally did get some troopers down here to help us, we did the drug roundup, we got arrest warrants for 35 people and all we [were able to] hit were the street people. I mean [we got] the guys on the corner . . . that's all we got, we never got anybody big. I mean, we just didn't have the time, [and] we didn't have the personnel to go any deeper."

Way of Life

One of the aspects of life that changed during the oil spill and cleanup was recreation in the community. According to the director of Parks and Recreation, the department is getting more involved in organizing leagues than players used to. "A lot of people are just really burned out from all of the work this past year [1989] and they don't want to give any more energy toward anything. They'll show up and play every now and then but [they have the attitude] 'don't make me organize anything'." Attendance was down at the structured activities, such as softball, which instead of a usual four to eight tournaments per season did not have any tournament during 1989. According to the director, "our usage of all programs went up dramatically -- from an open basketball program that would get maybe 15 people a night went to 95 people using it." There was also a huge demand on public shower facilities, and additional units were installed.

One particularly charged recreational issue in Valdez was the closure of the swimming pool for a month and a half during the summer of 1989. This was directly related to the oil spill. A part that went down normally could have been repaired within the community had to be sent outside, because the local resources were contracted to Exxon. Swimming is a valued recreational activity, and like the gym is an "open" rather than an organized activity -- just the type that was being used during the spill period.

Camping is a seasonal activity in Valdez, but during the spill year, the Department of Parks and Recreation "went into the camping business -- we were severely impacted trying to provide accommodations for people to camp." Camping spaces normally used by seafood processing workers were taken by oil spill workers, and a new campground had to be constructed and existing facilities expanded.

Within recreational programming, at least, the spirit of volunteerism is down in the community following the oil spill. This has carried over into 1990, with respect to getting volunteers to help out with youth programming. Organized recreational league participation is down significantly as well -- basketball and volleyball leagues were "flops."

According to one resident, an important change in the way of life of the community was a change in feelings of security. He reported that "people were locking doors during the day - when they were at home." He further stated that the greatest concern was that "we were not in control of our community." This control extended even to one's own property -- we had "no control over who was going to camp in our backyard and piss in our bushes." According to one city administrator, armed guards in front of several of the buildings in town, and the general level of activity of Exxon and the media "created a state of siege" in the community. One of the cleanup facilities on the waterfront was fenced in with barbed wire, and this added to the perception. Further, one official spoke of the frustration of not having emergency zoning regulations to better control the exponential temporary growth.

Other residents spoke of the changes in the community services brought about by the number of transients. One community leader was bothered by having to stand in long lines at the post office and the grocery store, and having a large portion of the goods in the store sold out in any event. He reported that with the crush of people one didn't see friends and familiar faces, and one of the nice things about the slow down in the winter was running into friends and neighbors again around town.

Family

Individuals in Valdez often discuss the impact of the spill on family life. The immediacy of the problems associated with the spill were often all-consuming. According to the city manager, "you had less time to spend with your families, obviously, [and] any ideas of going on vacation were wiped out, you just had to stay here and work on it." Later in the summer,

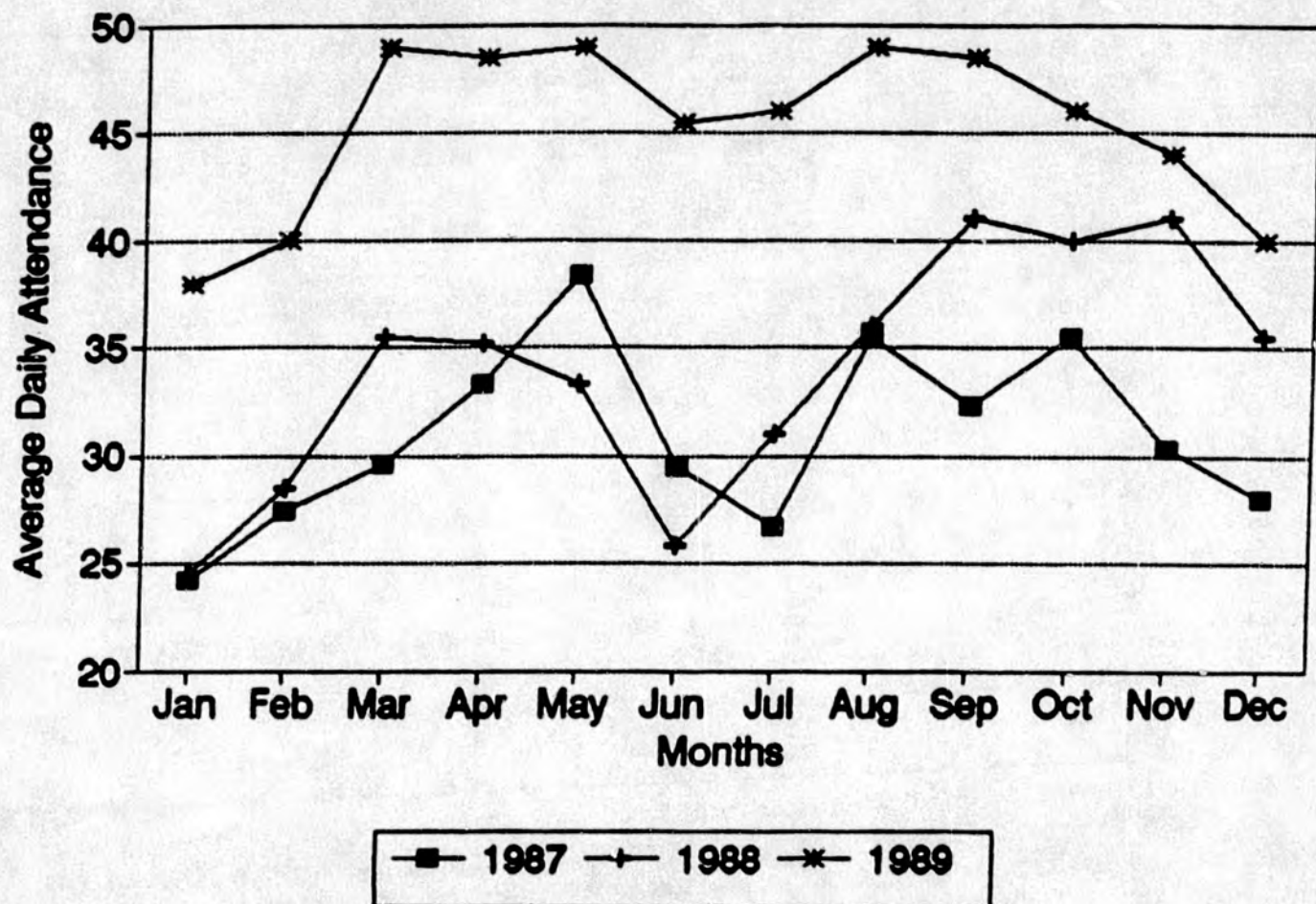
it became obvious that things had to change. According to the city manager, it "just kind of became a blur after awhile, just activity . . . I tried to tell my staff pretty early on, that you need to take some time off, get out of town for a couple of days, and that this thing [the oil spill] . . . nothing's going to change, this thing is still going to be here. I took some time off with my family . . . at the end of August . . . after a while it became apparent that this was not a hundred yard dash type of event, that it was going to be a marathon, so to speak, that we had to start pacing ourselves, and telling people to knock off and go on home, not only to leave, but leave town . . . go camping or something and get out of town, the problems would be here when you get back. . ."

Parks and Recreation children's programming extended hours during the cleanup summer. Normally running from 9:00 a.m. until noon, an afternoon program was added "because so many of the kid's parents, both parents, were working, so we were trying to provide a structured, safe program for kids . . . [to] keep them away from downtown where . . . the traffic was a real major problem here this summer [1989]. . ." Staff turnover was high in the lower pay category jobs, and the department was forced to hire younger employees than would otherwise have been the case. According to one staff member, "typically we try to hire not younger than 16 for our day camp, but we had several fourteen and fifteen year old kids," who were available because they were not old enough to qualify for spill-related work. Overall, according to senior department personnel, youth recreation programs suffered for a lack of volunteers due to high employment on cleanup work.

Day care was impacted because of the spill as well. Of the two regular day care centers, one shut down entirely. At the second center, employees threatened to quit for hire wages working on cleanup, and according to the director of the day care center, if it wasn't for the otter cleaning program, the day care center would have folded. Shortly after the spill the otter cleaning program started up, and Exxon approached the center to supply day care for the volunteers working at the otter center. Day care employee pay was supplemented by Exxon to keep them on the job. Day care hours were normally 6:00 a.m. to 6:00 p.m.; during the height of the cleanup Exxon paid to keep the center open an additional six hours until midnight. Three additional workers had to be added, and this lasted through the months of April and May before the otter center closed down. (Supplemental funding continued through the end of June, but following the end of funding there was an almost complete turnover in employees.) According to care providers, the children were irritable and cranky from being unused to being away from their families for so many hours at a stretch, and this was, in turn, hard on the staff. According to the director, 50% of the children were spending 12-13 hours per day in day care whereas before the spill they were spending 7 or 8 hours per day in day care. While no records exist, it has been estimated that twelve to fifteen in-home, non-licensed day care centers were established during the spill period. Difficulties were created at the one remaining licensed center because of demand: license restrictions dictate a maximum number of children at any one time, and there was no place to send the additional children once that ceiling was reached. The following graph is from one of the Valdez day care centers. It shows that average daily

Valdez Day Care

Average Daily Attendance, 1987-1989



attendance at the center in 1989 was consistently higher than the previous two years, which is consistent with informants' reports. The higher attendance record for January through March of 1989, before the oil spill, was unaccounted for.

Demand for emergency social services was high during the spill. The demand for services provided by the Valdez Emergency Assistance and Foodbank "was incredible." Two volunteers were needed full-time at the food bank. The shelter run by the Lutheran Church had 25-60 people during the summer; a soup kitchen was available daily during the summer. The Baptist church offered free meals on Friday nights; at the peak between 400 and 500 people were fed in a single night. Fortunately for the community, the structure for feeding many people was in place due to the fact that the community experiences a seasonal influx of seafood processing workers, however, the level of demand created by the spill was unprecedented and severely taxed the system. Two groups that were credited with filling the increased demand for volunteers were local homemakers and seniors.

Education at the community schools was reportedly not greatly affected during the cleanup period, however there were strains on the staff due to involvement in other activities. For example, a significant number of staff members were involved in the otter rescue work in their off-duty time. There were at least three individuals who left school to work on the oil spill. At least one of those persons finished their education by means of obtaining a GED certificate. The community Teen Center showed a marked increase in activity during the summer of 1989. Monthly statistics are presented in the following table.

**Valdez Teen Center
Monthly Attendance Statistics, 1988-
1989**

Month	1988	1989	Change 1988-1989
Jan	1682	1242	<440>
Feb	1254	1548	294
Mar	1360	1477	117
Apr	1332	1592	260
May	1555	1962	407
Jun	1235	1426	191
Jul	1269	2048	779
Aug	1087	1907	820
Sep	1177	2068	891
Oct	1772	1745	<27>
Nov	1275	1403	128
Dec	1804	1733	<71>
Total	16,802	20,152	3,350

Enrollments at the local branch of Prince William Sound Community College were greatly impacted by the spill. Summary statistics are presented in the following table:

Valdez Enrollments Prince William Sound Community College 1986 - 1989					
Semester	1986	1987	1988	1989	% Change 1988-89
Spring	309	314	258	160	<61.2%>
Summer	137	108	139	32	<334.4%>
Fall	325	365	272	308	13.2%

Source: Prince William Sound Community College

The facilities of the college were heavily impacted by the spill. Buildings were used for a variety of purposes, and the college was reimbursed for their use, but it was an extremely disruptive time. It is also important to note that the president of the college was also the mayor of Valdez at the time of the spill. Normally a limited tax on his time, the mayor's position was a consuming one during the spill period. The college also lost a significant number of staff through individuals resigning to work on the cleanup for higher wages.

Mental Health

According to the director of the Valdez Counseling Center, the sheer number of clients rose dramatically as did emergency calls. Although exact figures are not available, many of the client calls were from old clients who either returned to counseling after a hiatus, or continuing clients who increased their number of visits. Again, although exact numbers are not available, the director is of the impression that most of the increase in load is attributable to local residents while, on the other hand, emergency calls were mainly caused by the influx of marginal people into the community who often caused problems. The police would often call the counseling center for help, which was a need to be filled, but according to the director this took a lot of time away from other tasks that were also necessary. Summary statistics are found in the following table; a discussion of a study conducted by the Counseling Center is found in the section treating the results of the household survey.

Valdez Counseling Center New Clients 1987 - 1989					
	1987	1988	1989	% Change 1987-88	% Change 1988-89
New Clients	64	82	149	28.1%	81.7%
Average New Clients Per Month	5.33	6.83	12.42		
New ASAP Cases	105	0*	263		
Average New ASAP Cases Per Month	8.75	0*	21.90		
* No Alcohol Safety Action Program during 1988.					

Source: Valdez Counseling Center

During the cleanup period, and in the period following, there has been a "real demand" by junior and senior high school students as clients in the after-school hours due to behavior problems. This difficulty was predicted by the director, and it came to fruition. Overall, patient load in all age groups was up to the point that while no one was actually turned away, people sometimes had to wait two weeks for an appointment. Clearly, this was not a desirable situation; before the spill the wait for an appointment was two days or less.

In terms of particular difficulties, an increase in problems in relationships between people was noted. According to the director, problems with depression or anxiety were present, but not to the degree of the difficulties in relationships, and "many couples required counseling." While many of the problems couples experienced may well have had their roots before the spill, "undoubtedly the spill greatly aggravated their problems and caused considerable stress" and many of these couples are still working on the difficulties.

The director of the center sees many of the mental and emotional problems that people have been experiencing as long-term difficulties. To this end, the center has been conducting a long-term study in both Valdez and Cordova. This study is designed to measure social support, stress, anxiety, and depression. The study took measures during the active cleanup period, the winter following, and one year after the spill. The findings after one year support the hypothesis that, "the oil spill was an extreme stressor that could cause emotional problems for area residents." Cordovans were found to have a higher incidence,

intensity, and duration of stress than residents in Valdez. In this same vein, Valdez residents perceived social support to mediate stress, while Cordovans did not. The following figures (next page) were developed from data from the Valdez Mental Health Clinic. They compare the number of ASAP cases by month for 1987 and 1989 (data were unavailable for 1988) and new clients by month for 1987-1989. The general trend emerging from these figures is an increase in both new clients and clients with alcohol abuse problems in the year following the oil spill.

One of the difficulties with the counseling services during the cleanup was the fact that Exxon took office space in the building across the hall from the counseling center. Exxon posted armed guards in and around the building, and some clients complained about the presence of the guards and of being challenged to identify themselves, and so on. Although numbers are not available, it is thought that the guards and the presence of Exxon may have deterred some clients entirely.

Advocates for Victims of Violence (AVV), a group that provides shelter, advocacy, crisis intervention, counseling, referral, education, and outreach programs in Valdez also experienced a large increase in demand for services during the spill cleanup period. Utilization of crisis lines increased dramatically, and according to the director, the issues that people manning the crisis lines heard were mainly people needing to talk about what was going on -- they were depressed about the situation and "it was like listening to people grieve." Selected summary statistics are presented in the following table.

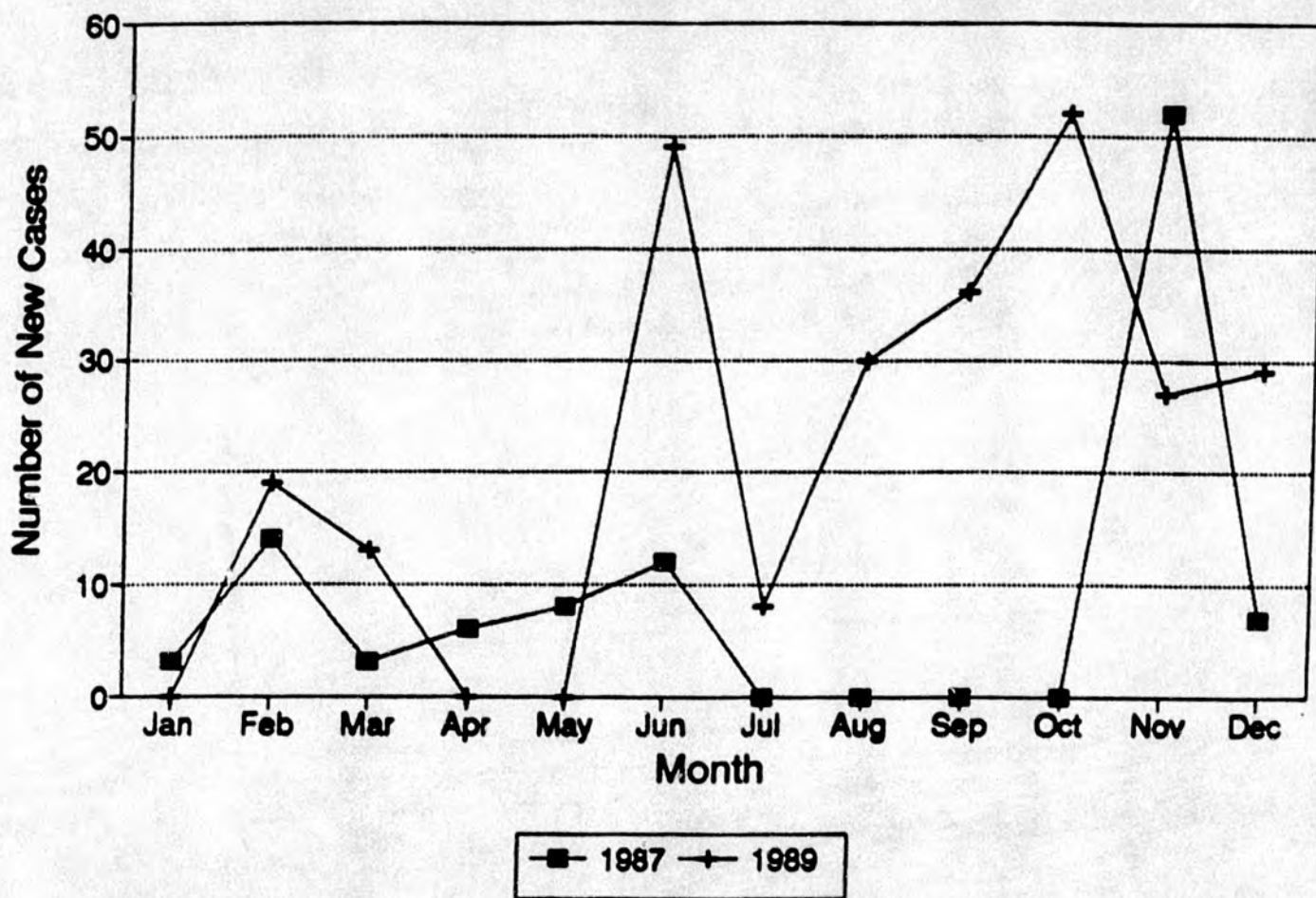
Advocates for Victims of Violence (Valdez) Selected Statistics, 1988-1989			
Type of Service	March - Sept. 1988	March - Sept. 1989	% Change 1988-1989
New Clients	82	179	+118.3%
Shelter Nights	154	264	+71.4%
Crisis Calls	36	217	+502.7%

Source: Advocates for Victims of Violence

The largest increase in a short period of time was in the category of shelter nights for the months of July and August. During this period in 1988 there were 11 shelter nights; during the same period in 1989 there were a total of 226 shelter nights.

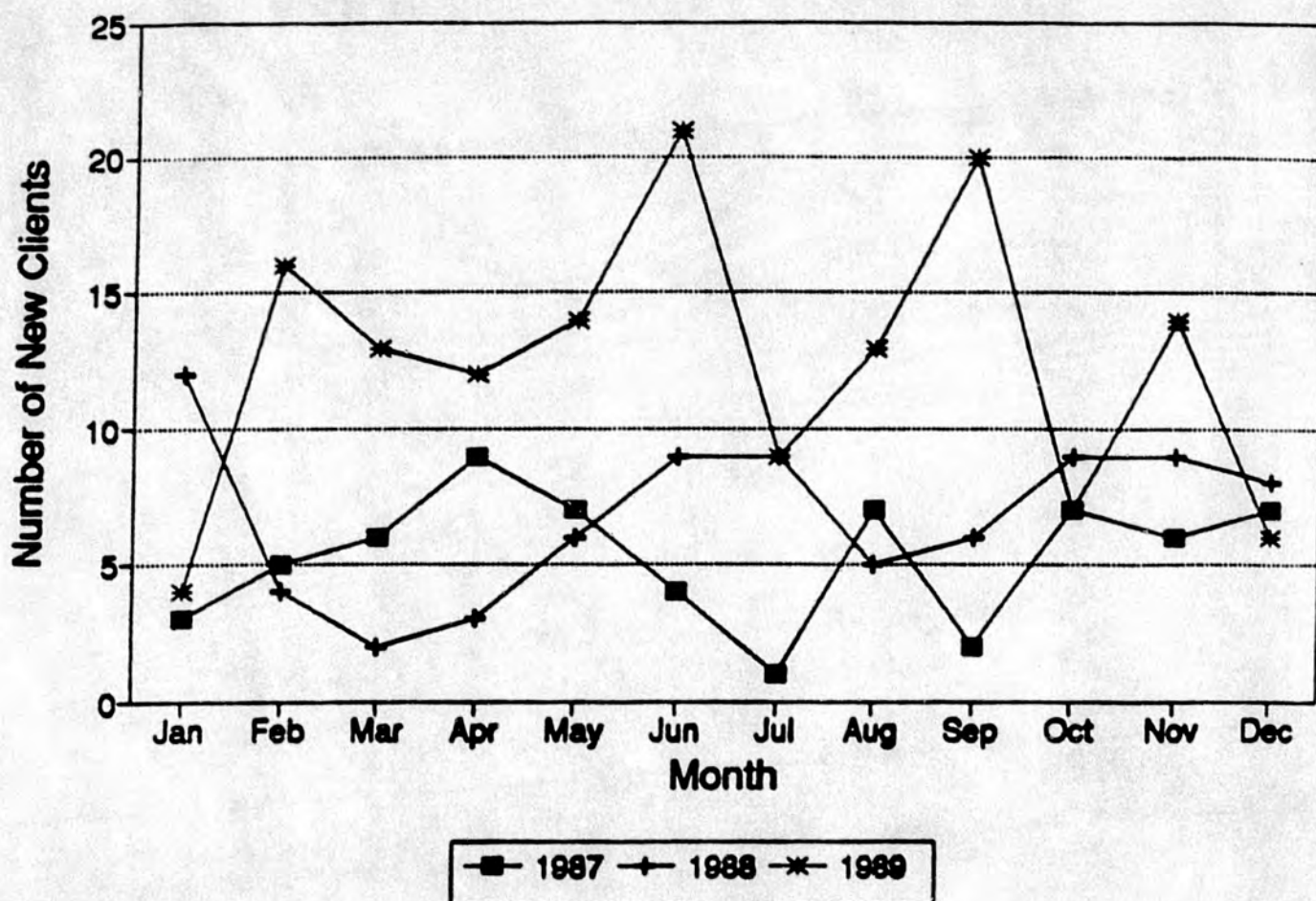
Valdez Mental Health Clinic

Number of ASAP Cases Per Month by Year



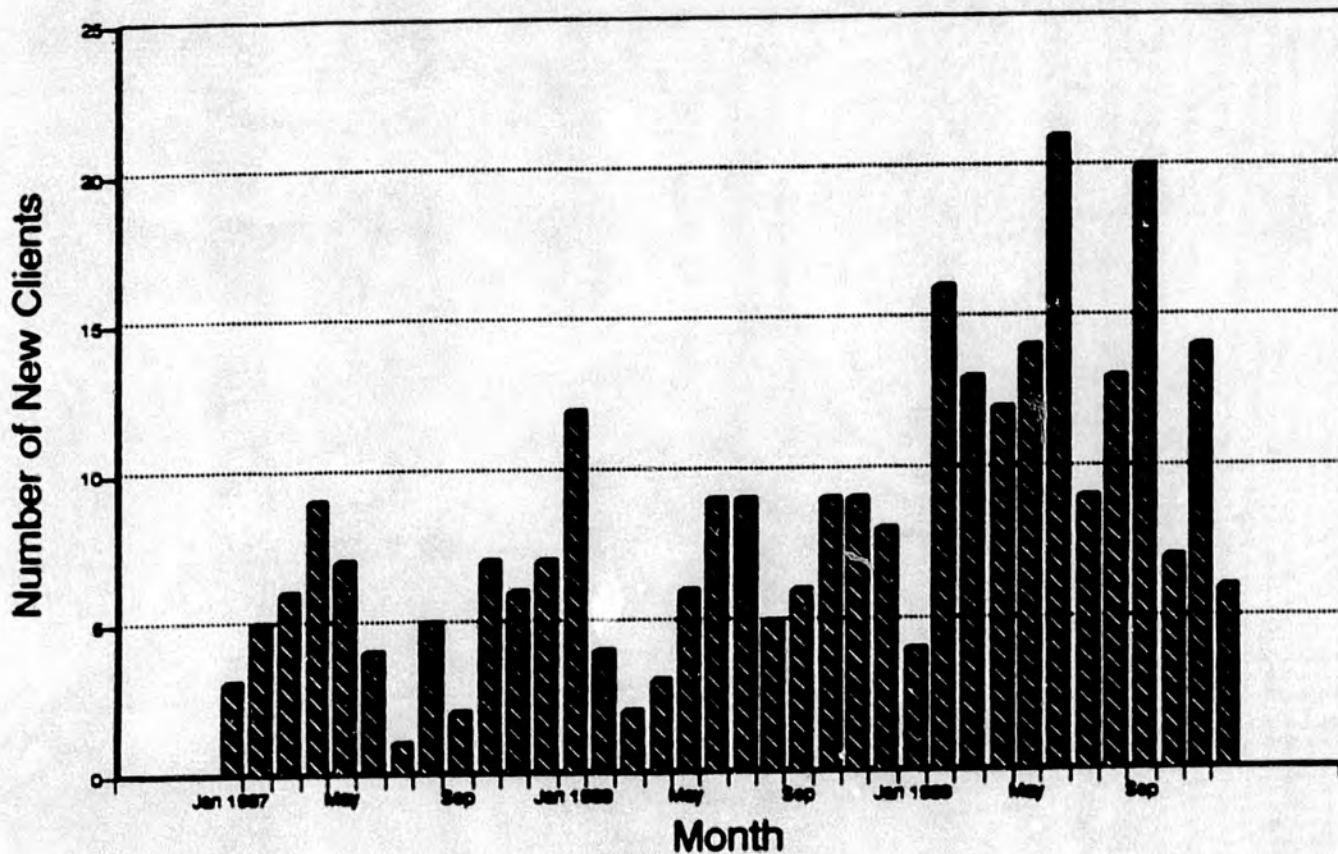
Valdez Mental Health Clinic

Number of New Clients Per Month by Year



Valdez Mental Health Clinic

Number of New Clients Per Month by Year



AVV also serves clients who come from Cordova and Tatitlek, and "their lethality assessment was extremely high," according to the director, and the women who sought help from those communities were in dangerous situations. The director also stated that there was a direct increase in sexual assault and rape attributable to conditions surrounding the spill and cleanup. There were family disruptions and "a lot of tension, a lot of violence." Children were in need of services because, according to staff, a lot of single mothers and fathers came with their children to work on the oil spill.

Specific problems at AVV included:

- A loss of crisis line volunteers. Prior to the spill there were 25 volunteers; at one point during the cleanup they were down to 6. (It is also important to note that new volunteers were lacking in training as well, even when replacements were found).
- Shelter and advocacy staff decreased while demand increased.
- Counseling, outreach, and education were not as available as before the oil spill, as the crisis situation demanded priority attention.

There is some resentment in Valdez over what is perceived to be a situation of "blaming the victim." In the words of one long-term resident, it was very difficult when "people thought we had done this to ourselves." According to this person, the "propaganda machinery has made this the Valdez oil spill rather than the Exxon Valdez oil spill." One of the first t-shirts to be appear in town after the spill carried the words "No Finger Pointing, We're All to Blame."

Medical

Service Provision

As noted earlier, there was a marked increase in demand at the Valdez Community Hospital associated with the oil spill. Summary statistics, comparing 1988 and 1989, are presented in the following table.

Valdez Community Hospital Selected Statistics, 1988 - 1989			
	1988	1989	% Change 1988-89
Outpatient Procedures	5,000	10,000	100%
Emergency Room Visits	1,505	3,371	124%
Revenues	\$871,635	\$1,279,194*	47%*
Expenses	\$1,381,727	\$1,799,040*	30%*
Percent of Occupancy	21.53%	23.90%*	11%*
* Estimated			

Source: Valdez City Manager's Office

There were other sources of increased demand for services as well. The hospital acted as a broker for medical supplies for VECO, as they had no network for acquiring them. According to staff, this caused a significant increase in workload. The hospital was also used as a source for medical supplies for the care of oiled otters.

In addition to overall increases, there were times of peak demand where capacity for expeditious care was exceeded. According to one senior staff member, there were times when there were 30-50 people waiting in the emergency room for care, and there were periods when the number of inpatients tripled and the number of emergency room visits and demand for X-Ray services quadrupled. At the height of activity, there were up to six emergency medical transport helicopter landings per day landing at the hospital; previously there had been around one per year, and on one occasion there were two landing simultaneously. Personnel were lost to oil spill work; to partially offset demand it was arranged through the office of Emergency Preparedness to have Public Health Service physicians help on a rotating basis, and assistance through provision of a lab tech was obtained as well.

Increase in patient load was characterized by staff as being primarily male 18-45 year old oil spill workers. Some people who would have otherwise sought services decided not to as they "didn't want to wait 5-6 hours for service." There were public health problems

associated with the conditions surrounding the spill that had staff concerned. According to one senior staff member, there was a "horrible bronchitis" that went through town, and there were some people who had to be hospitalized for pneumonia. From the public health perspective this was worrisome, because there were "people living outside, in cars, under bridges" and so on.

According to hospital staff, to help with the health care load, VECO established a clinic in the latter part of May, 1989, and staffed it with two nurse practitioners and two nurses who did initial assessments. A barge clinic was later set up for triaging patients on the water, but the initial clinic was "totally overwhelmed." Doctors rotated in, but coverage was not continuous. Reportedly coordination between the hospital and Exxon was good, but coordination between private doctors and Exxon was nonexistent.

According to a senior staff member, most of the oil spill cleanup-related care was directed toward assorted injuries, cuts, broken bones, and skin rashes. There was a large number of sufferers of what was termed the "Valdez Crud" -- a relatively severe upper respiratory infections.

Funding

Managed under contract by Lutheran Health Services, the hospital at the time of field research carried over a large balance of accounts receivable from 1989 into 1990, due in large part to the effects of the oil spill. On the other hand, donations were higher than in any past year. These included, by donor, the following items:

Exxon:

- Three hand-held radios
- Computer upgrade system
- Hypothermia blanket system
- One-half laboratory cost
- Equipment for processing CBC's

Fairbanks Memorial Hospital:

- Ultrasound machine

United Way:

- Televisions for patient rooms

Emergency Medical Services

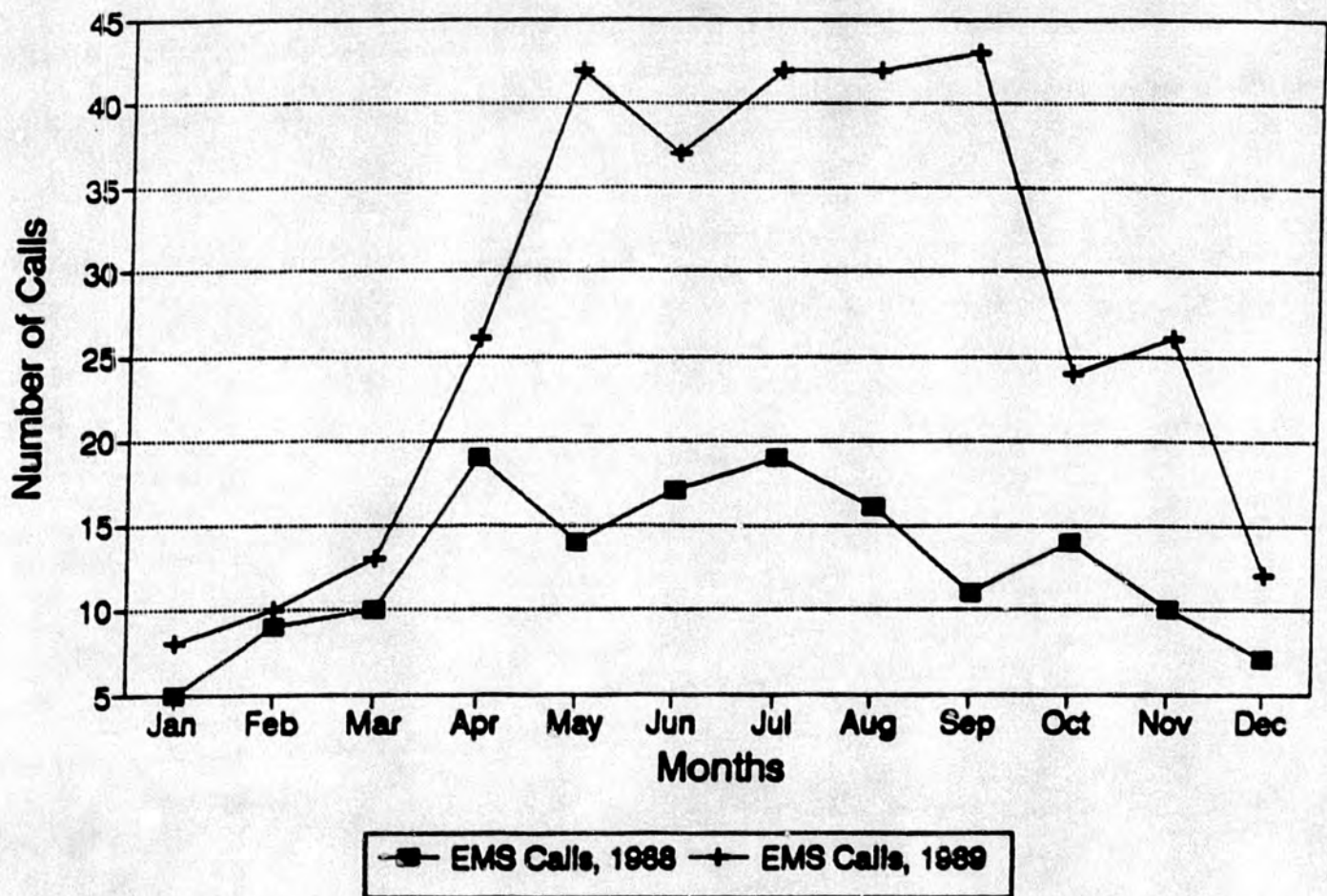
Summary statistics for fire and EMS calls are presented in the following table and figures. As shown in these figures, emergency response was the major activity of fighters and EMTs following the oil spill. Fire and EMS service provision are discussed elsewhere under the treatment of the Department of Public Safety.

City of Valdez Fire and EMS Statistics 1988 and 1989			
Call-Outs	1988	1989	1988-1989 % Increase
Ambulance Call-Outs	151	325	115.2%
Fire Call-Outs	63	95	50.8%
Fire Alarm Call-Outs	60	113	88.3%

Source: Valdez City Manager's Office

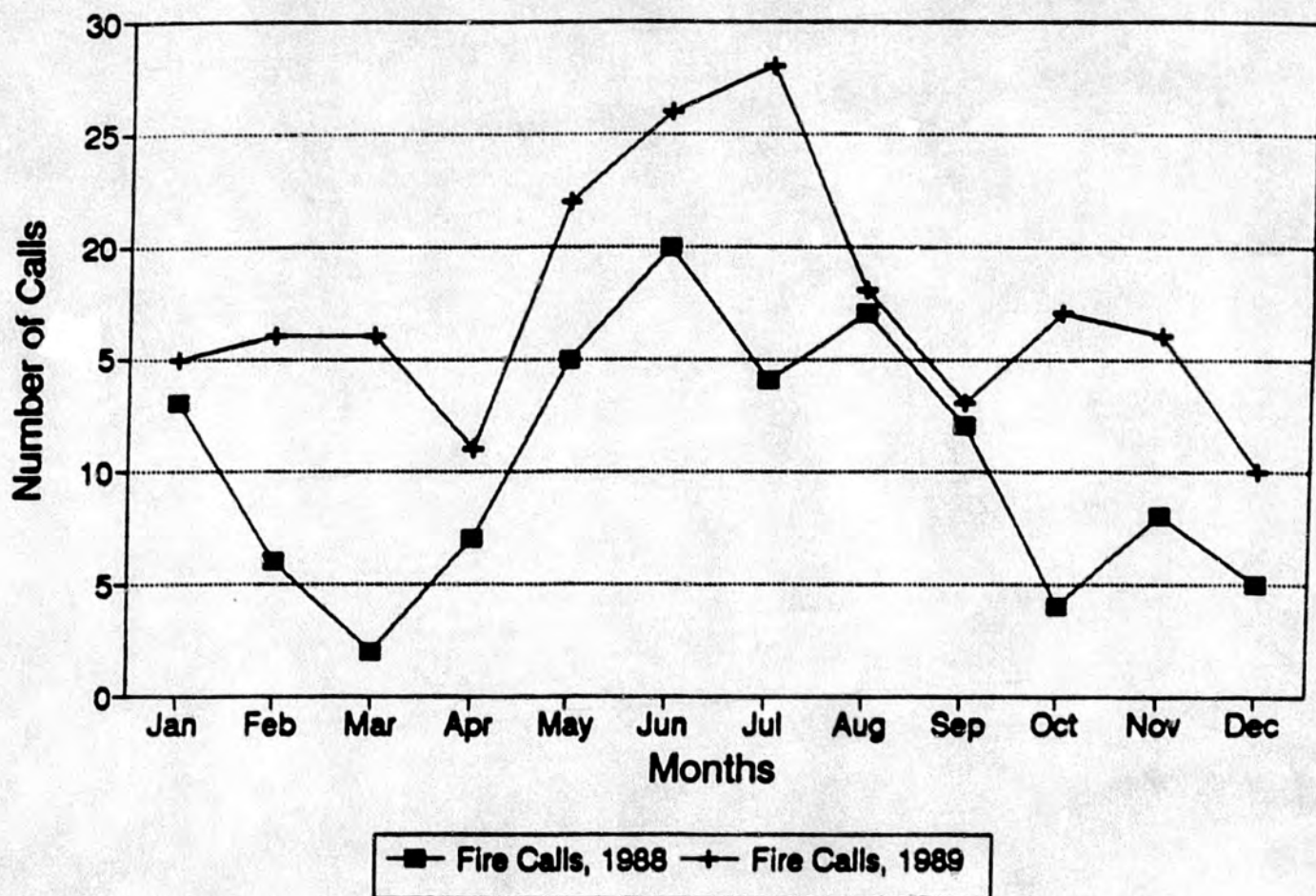
Valdez, Alaska

EMS Calls, 1988 & 1989



Valdez, Alaska

Total Calls to the Fire Dept, 1986-1989



City of Cordova

Cordova is a small city located south and east of Bligh reef, where the *Exxon Valdez* spilled oil in the Spring of 1989. Cordova was incorporated in about 1909 as a second class city. The annual budget of city government is about 4 million dollars and between 30% and 50% of these funds derive from fishing industry-related taxes. The city council and the mayor, an unpaid position, have policy and statutory responsibilities while the city manager presides over the day-to-day operations of the community. Cordova has a population of about 2,500 persons, including a number of Native Alaskans. Some of Cordova's population consists of seasonal residents who live in Seattle or elsewhere during the winter, but reside in Cordova for the summer fishing season. There is no road to Cordova. The community is accessible by air during the winter months and there is a ferry that connects Cordova to Valdez, Whittier and other parts of Alaska during the summer.

Cordova is a fishing town. There are rich Salmon, Herring, and other resources in nearby Prince William Sound and the Copper River Delta. The significance of fishing for Cordova is indicated by the number of limited entry permits in the community. As the table below indicates, Cordova has more limited entry permits than the other major towns near Prince William Sound.

Community	1988 Permits
Cordova	634
Anchorage	174
Valdez	85
Homer	83
Seward	50

The significance of fishing is also indicated by a thriving salmon aquaculture business developed in Cordova. The Prince William Sound Aquaculture Corporation built several hatcheries around the Sound and fish released from these hatcheries have a significant part in the local ~~fishing~~ economy. Cordova also has several fish processing plants that employ significant numbers of workers during the fishing season. Importantly, Cordovans are also self-identified fishermen. As one Cordovan observed, "As professional fishermen, our lifestyle is made up of fishing and living in Prince William Sound. Our choice, as it is every year, is to fish; not clean up oil spills for a living. Now, however, cleaning up the oil spill and the eco-system of Prince William Sound is the only choice we've got."

Cordova is also a town that has a history of opposing oil development, asserting that oil poses fundamental threats to the fishing industry in Alaska and especially in the Sound. Cordovans have been active in their opposition to oil development, promoting legislation and initiating legal actions that were intended to insure the safety of fishing that supports the economy of this community. Despite some successes in their efforts, the worst nightmares of Cordovans occurred on March 24, 1989 when the "big one" finally happened. Even though the event was for some not unexpected, the actual magnitude of the event brought home the realization that this nightmare was of horrific scope.

Response Effort

Exposure to the Oil Spill and Cleanup

Even though Cordova was not directly oiled, it was exposed to the direct effects of the spill because of damage to areas used by local fishermen and it was also exposed to the effects of the cleanup by the role the community played in responding to the spill. These two different exposure routes are important because they represent two separate types of impacts, each with its own demands and stresses. Some features of these different exposure routes for Cordova are briefly summarized below:

- (1) The spill directly damaged the commercial fishing areas used by Cordovans as well as areas that have aesthetic and recreational importance for the community.
- (2) Residents were among the first to realize the scope of the spill, the death of wildlife, and damage to beaches and shorelines in areas valued by the community for aesthetic and economic reasons. The realization of actual and potential damages was transmitted from those with direct experience to others in the community early in the event resulting in a breadth of exposure within the community. This exposure to the direct consequences of the event plus the uncertainty of potential consequences persisted for an extended period of time.
- (3) Closure of salmon and herring fishing resulted in threats to the viability of the unidimensional economy of Cordova which is "almost 100% dependent upon fishing." Actual and perceived damages to the fishery also resulted in broad exposure within the community to the direct effects of the spill.

(4) Cordovans were among the first to initiate volunteer cleanup efforts and later the community became the homeport for the "mosquito fleet" that was active in responding to wildlife injured by the spill.

(5) The cleanup exposed the community to disruptions from outsiders seeking employment with VECO and Exxon. Housing shortages, increased demands for local goods and services, as well as the social demands of responding to new persons in a small community resulted in exposure to social disruptions that would not otherwise have occurred.

(6) The cleanup exposed local residents to social disruptions and economic impacts resulting from how the cleanup was implemented, i.e. the institutionalization of the cleanup by Exxon and VECO infused relatively large sums of money into some segments of the local economy and not others resulting in changes in economic patterns and social disruptions related to the distribution of cleanup resources.

Common aspects of exposure to the effects of the oil spill experienced by many communities are illustrated by the experience of Cordova. However, the specific economic and social structure of Cordova's economy resulted in a particular exposure pattern in which broad segments of the community were exposed for extended periods of time to both the direct effects of the spill as well as the direct effects of the cleanup.

Local Response Effort

The geographical isolation of the community and the absence of any road into the town seemed to heighten the perception among Cordovan's that they were the "forgotten city" whereas Valdez was in the spotlight, but not threatened in the same way as Cordova. Perhaps because of this heightened sense of isolation as well as the identity of Cordovans as "independent," a diverse community-based response effort quickly developed. This response effort was operational in diverse activities such as: (1) protecting fish hatcheries that might be damaged by the oil; (2) facilitating a claims process for those economically damaged by the spill; (3) establishing the community's interests as affected by the oil spill despite no direct oiling; (4) garnering business from the cleanup effort that might assist with off-setting economic damage done by the oil spill; and (5) participating in responding the injuries to wildlife caused by the oil spill. Among other reasons, these efforts were spurred on by perceptions that Cordovans needed to help themselves if the damage to the community was to be contained, and part of this self-help was to loudly proclaim that

Cordova was "different" and that it had unique needs that Exxon, the state, and others were not recognizing.

Two important aspects of Cordova's ability to field such a diverse and early response effort were (1) a pool of local leadership talent and (2) various public and private organizational entities to organize resources and implement actions. Cordova prides itself on the quality of its citizens and especially the level of literacy that exists within the community. Observations in the community early in the spill indicate that at least four major leaders were active in organizing community efforts. The quality of this leadership is indicated in the recognition by two national publications that Cordovans made major contributions to the total oil spill cleanup effort. Furthermore, organizations such as the Chamber of Commerce, Prince William Sound Aquaculture Corporation, and Cordova District Fishermen United (a local fishermen's union) represent significant organizational resources with access to boats, businesses, and labor that can be organized with effective leadership. For example, certain members of CDFU were among the first to travel to the spill site and Valdez to express the concern of Cordovans and offer the help of the fishing fleet to contain the oil. Once it was realized that boom to contain the oil was not on hand, CDFU members became partners with DEC and others to stop the oil from damaging hatcheries. CDFU organized almost 20 boats for immediate deployment for such a potential effort. Furthermore, the leadership of CDFU and other groups in Cordova were successful in getting the attention of outside agencies and political leaders regarding the threat the spill posed to the community. At one of the first press conferences in Valdez by Alaska's Governor, no representative from Valdez stood on the stage with the Governor, but a CDFU official was there representing the interests of the fishermen of Prince William Sound. The existence of such leadership and organizational resources was an important element in the ability of the community groups to respond to the effects the spill.

In the first few weeks of the spill an Oil Spill Response Office was organized with a Steering Committee that was to oversee its operations. What began as a volunteer effort was quickly institutionalized by the City and offices were located in City Hall and funds for operation were provided. Yet, there remained for a period of time in which individuals contributed volunteer labor to staff the office. This oil spill response office along with CDFU became important focal points in the response effort. The spill response office acted as an information center. It published a "Fact Sheet," organized public meetings to share information and discuss spill related issues. This office functioned as "information central" for rumor control and response to inquiries about the oil spill. In general, the attitude among most Cordovans during the early days of the spill was one of, "How do I help" What Can I do?" and this was expressed in the local support offered to the spill response office and by CDFU fishermen who were willing to use their resources to do whatever needed to be done. However, shortly after the oil spill occurred Exxon, through its contractor VECO, took control of spill response work and thereafter the attitudes, if not the actions, about spill response work changed.

Cordovans can easily describe the changes in the community after Exxon/VECO took charge: greed, factionalism, frustration, and increased concerns about the uncertainty of the effects of the spill multiplied. The influx of cash from lucrative boat contracts contributed to divisiveness and other such consequences that will be discussed in more detail later in this report. However, here it is important to note that some key informants suggest that the spill response effort in Cordova became mired in the Exxon bureaucracy and the problems that accompanied its organizational approach to the cleanup. That is, although there was and is a continuing effort within Cordova to respond to the demands placed on the community by the spill and the cleanup, the initiative, leadership, and resources of community efforts were overwhelmed by the locus of control of the cleanup effort being with Exxon and VECO rather than with local or state government. Furthermore, Cordovan's knowledge of local conditions and experience with the ocean was ignored, indeed some would say spurned, by Exxon and VECO.

Local officials and informal leaders throughout the community reported and immediate need for information about what happened at Bligh Reef and how serious the consequences might be. Numerous telephone calls were made from residents to anyone in official or unofficial leadership positions in the community. Additionally, media sources such as CNN and the public radio station in Valdez became important channels. Information seeking by formal and informal leaders was initiated by telephone calls to DEC, the Coast Guard, Alyeska, and any other potential source of information about the seriousness of the event. Clearly, Cordovans felt in the dark about what was happening and this resulted in efforts by the mayor and others to develop more knowledge about the event in any way possible.

The result was that several different groups of Cordovans traveled to Valdez to listen to and participate in press conferences by Alyeska and Exxon about the accident. Information was passed back and forth through friendship networks and formal channels, and eventually the Cordova Vanguard published a special edition, a historical first, about the spill. Soon, public meetings were organized by the spill response committee and the Fact Sheet detailing spill news was circulated to all Cordovans. These information channels plus news exchanged at gathering places such as the CDFU hall became highly significant sources of information that satisfied what were felt to be urgent needs for information about the spill. Generally, Cordovans evaluated the public meetings as serving important supportive and information needs and the Fact Sheet established a regular route for information transmission. Furthermore, the oil spill response office offered another source of news for those who wished to drop by or call. Despite what would seem to be sufficient information sources, many Cordovans remained anxious about access to the most current news and rumors about the spill and cleanup.

Another theme in the early response effort by Cordovans was the concern that they were the forgotten city and that other communities, especially Valdez, were receiving more attention and information than they were. There was an insistence among Cordovans that the spill would have "special" circumstances for them. As an informant emphatically stated,

'Cordova is unique. It is absolutely unique. We are the only place that will be affected by this that is 100 percent fishing. Valdez isn't going to be affected the way we are.' Yet, despite considerable concern that Cordova was being ignored and that its unique position was going un-noticed, as a community, Cordova was able to establish important political and other contacts that became available for various purposes. A representative from the Governor's office came from Juneau and was stationed across the hall from the spill response office. Cordova's Senator and Representative were in contact with local officials and at one point there was a representative from the Senator's office also in Cordova. And after some 42 days after the spill, even Exxon recognized the "unique" character of Cordova's fishing economy and agreed to consider claims from businesses that were not directly involved in fishing. The vocal character of Cordovans and their willingness to pursue information and demand answers seems to have resulted in access to external resources that helped the community to pursue its concerns. As Cordovans were fond of saying, "The squeaky wheel gets the oil."

Local Government

The City Manager and Public Works Director both left their positions, for reasons unrelated to the spill, shortly after March 24, 1989. In a small city government the loss of two management positions places large demands on a relatively small staff. Added to this burden, the oil spill occurred, resulting in some specific demands which further burdened city government. The demands the oil spill placed on Cordova were not unlike those experienced by other communities in Prince William Sound and Kodiak, although how the characteristics of the event intersect with the conditions in Cordova do give the process of local government operation during the spill a unique character. Consequently, in this brief discussion of non-fiscal local government impacts, the focus is on some of the significant impacts to local government without necessarily fully developing the process of impact occurrence.

It is important to remember that the scope and circumstances of the oil spill and cleanup place this event outside the normal range of usual circumstances people experience in their lives and certainly outside of the response capabilities of a small municipality. In these extraordinary circumstances the spill had certain impacts on local government which, as noted above, are generally shared with other communities in this study. These impacts are: (1) usual government business was displaced by oil spill response work; workload increased; (2) responsibilities and duties of staff were changed, usually with results for increased workload; (3) labor was either in short supply or the quality of labor presented problems as some staff left for cleanup jobs; and, (4) there was the experience of increased stress, work-overload, and burnout because of increased responsibilities, long work hours and no time for vacations. Each of these issues is briefly developed below.

The Displacement of City Business with Oil Spill Response Activity

The scope and duration of the *Exxon Valdez* event resulted in the focus of city staff and elected officials work and attention being directed in one area: deal with state and federal agencies, VECO, Exxon, the media, concerned citizens, researchers, and others who for one reason or another required information about the spill or some other official act in relationship to responding to the spill. Furthermore, once the cleanup became institutionalized by Exxon and VECO, the city had to respond to the administrative and accounting demands of these organizations even to get reimbursed for expenses incurred as part of the cleanup. In a relatively modest budget, the cash flow issues inherent in providing services and procuring needed supplies and equipment and then waiting for reimbursement from Exxon or VECO resulted in the disruption of usual city business. Furthermore, the need to establish different administrative and accounting procedures resulted in momentum being lost regarding preparation of budgets and other the administrative activity required to maintain efficient and effective operations. The oil spill grabbed the attention of the city and thereby dominated the issues and daily concerns in local government operations. Usual business was set aside to attend to more immediate demands that invaded the most fundamental level of city operations. As one informant observed, "... Things just got slowed down. People were running around asking people to do this and there were thousands of phone calls. Can I use your computer. Can I copy this? Do you have anything on this? Can I talk to you about this issue?" The information in the interviews with city officials and staff illustrate that there were really few choices that people felt they could make about their work. Instead, they simply had to attend to the immediate demands from their coworkers, citizens, and others who were focused on oil spill issues. As another person observed, "It was all there was time to do..."

Elected officials, including the mayor, the vice mayor, and members of the City Council were engaged in numerous meeting about the spill with each other, with citizens, or with representatives from groups or agencies from outside the community. In fact, the demands for information became an important component of how the spill occupied the focus of city activity, and especially the activities of several elected officials. Initially local citizens looked to local government as a source of information about what happened at Bligh Reef and what it meant for Cordova. Local citizens called government offices to seek out what was known and information about what threats the spill posed to the interests of Cordova. Within a week or so of the spill, the national and international news media discovered Cordova and shortly thereafter there were requests from a multitude of media sources for information about the spill and its effects on the community. Later, various state agencies made either fact finding visits or telephone requests to Cordova requesting briefings or other official statements about the effects of the spill. And, there were various private groups, e.g., National Wildlife Federation, and other fact finding groups, e.g. researchers, who also made demands on local government staff for time and information regarding the spill and its effects.

There are also several other areas in which city business was displaced: (1) planning and development tasks usually performed by management staff were interrupted or postponed; (2) usual contracting activities were superseded by oil spill work because contractors were either involved in spill response work or contract labor was unavailable because of competition with cleanup wages; and (3) maintenance on equipment was put in abeyance because of the demands of responding to the spill.

Increased Workload and Changed Duties and Responsibilities

Elected officials and city staff expanded the range of their duties and responsibilities in response to the demands of the spill and cleanup. The mayor became a major spokesperson for the city and this usually part-time unpaid job swelled into one that was full-time. Some of the same types of pressures were placed on other elected officials in city government. For these individuals the consequences for their personal lives were often negative. Business involvement was diminished and time with families and friends was also affected. In their work as city officials, workload increased so greatly that their personal lives were disrupted or strained. Similarly, among paid city staff, the vacancies in City manager and public works director positions resulted in one city staff person doing his own job as well as parts the city manager's job because the demands of both oil spill cleanup pressures. Not only did duties and responsibilities change, but usually the workload of many staff increased substantially. Every department head interviewed in Cordova reported that they worked increased hours and did a wider variety of work than before the oil spill. Gradually, there became less and less time for usual business as the demands and attentions focused on the spill and cleanup process.

Labor Consequences

Although there was not a massive exodus of city staff for high paying cleanup positions, there was turnover in some departments and there was a labor shortage in some temporary positions. The pattern of turnover in most departments was the loss of less skilled labor. Many department heads reported on the loyalty of most employees, yet at the same time many staff experienced pressures to join the cleanup effort and make the short-term, but high paying wages. Nonetheless, turnover often resulted in severe strains because of the time and effort of having to train each replacement person and also because many replacements were not of the same quality as previous employees. One staff person observed that retention of these lesser qualified persons might have longer term consequences, "If you begin to water-down the qualifications of the people that you're hiring, going lower and lower in the labor pool, you're going to have a long term impact that may or may not be measurable for years to come." Also, there is often seasonal employment that relies upon a pool of available labor to complete the work, but the competition with the cleanup resulted in this pool being unavailable. Ultimately, work in certain city departments

either was not completed or else the existing staff increased their workload to accommodate the tasks.

Overload, Stress and Burnout

Almost without exception, every interview with city staff mentions personal stress, overload, and burnout as a consequence of the event. In this context, we are not reporting on objective measures of stress, but rather on the subjective experiences of individuals. Objectively, certain key elected officials and city staff were under increased pressures because of the new and additional responsibilities plus long work hours that kept them away from their usual support networks. Also, most department heads worked long hours for extended periods of time, without vacations and other forms of support and activity that could buffer the effects of job stress. Objectively, these would seem to be conditions that could result in objective findings of "stress" in individuals. Staff in departments in which it would not be expected that the oil spill or cleanup would make excessive demands on either workload or duties and responsibilities did report stress and burnout. The unexpected reporting of stress among city staff where such findings would not be predicted is accounted for when the general turmoil of city government operations is considered: nothing operated as usual. There was extensive disruption to administrative and management routines and procedures and there were significant examples of usual roles and statuses being modified to meet the demands of the oil spill. The disruption of the usual system of doing business for an extended period of time appears to have increased the general level of distress and experience of personal "stress" and burnout.

Changes in Community

Once the volunteer cleanup gave way to a cleanup for pay, VECO employment and boat contracts with Exxon became an important source of impacts that affected the "community" of Cordova more immediately than did the oil spill itself. In this report two specific types of impacts to "community" are of concern: (1) quality of life impacts and (2) community integration impacts. Quality of life impacts addresses issues such as in and out migration, housing availability, cost of living, and income changes. Community integration impacts address changes in social relationships within the community and the effects on the availability of social support resources. Impact issues in each of these two categories are briefly developed below.

Quality of Life Changes

At different points in time Cordova both gained and lost in population as a result of the cleanup. However, the story is not so much in the absolute numbers of losses and gains as

it is in the actual types of individuals coming into and leaving Cordova. Initially, there was an in-migration composed of individuals seeking cleanup employment, VECO staff working on the spill, various state and federal agency personnel, and miscellaneous voyeurs of the event. Cordova did not experience the same degree of population influx as did Valdez, but a relatively small increase was highly significant for Cordovans. This increase in population, while not extensive, was experienced as a negative change in the usual pattern of Cordova life. As one informant observed, "The ones that came to town were not the same caliber of people we usually have here . . . We always have people hanging around town, but they are our fishermen and last summer they were out working and instead we had these other people who were around." Implied in this statement is an intimation about how social interactions changed in Cordova: strangers around town for extended periods of time altered how people interacted with one another and this sometimes resulted in interpersonal discomfort. This is not to imply that Cordovans are inhospitable. They are. However, the issue is that "transients" who remain for long periods of time were perceived to alter the social environment of the town negatively. Some of these "transients" worked on the spill, made their money, and then moved away from Cordova. Others did not. There were also longer term Cordova residents who moved away after making oil spill income. Another informant observed, "I kept track for awhile of all the families that moved out, bought houses elsewhere and maybe now only have a warehouse here for their fishing equipment. They are here, but they aren't, their kids are gone from school, they don't shop here anymore, and that changes things. I stopped keeping track at about 30 families." Other data indicate that in fact there was a decrease in school enrollments after the oil spill and this may be accounted for by the out-migration by those community residents who moved away after earning oil spill money.

A consequence of the in-migration was a decrease in the availability of housing. This was the result of at least two different factors. First, the 600 or so available units to accommodate travelers to Cordova quickly filled up and a shortage of temporary housing ensued. This shortage persisted for long periods of time, resulting in some new bed and breakfast business ventures. Also, there was some temporary housing established in the Bidariki Center, but for most of the summer temporary housing remained a problem. Second, once the summer cleanup was over and many of the outsiders left town, there were shortages of rental units because the people who made money in the spill paid rent on empty apartments and houses in anticipation of the 1990 cleanup. Furthermore, others who moved elsewhere put local builders to work building warehouses to store fishing gear, thus tying up local construction resources.

The quality of life in Cordova was also affected by increases in the cost of living. Gas, food, rent and other basic living expenses increased in price over the summer cleanup period and beyond. The cost of getting into and out of Cordova also spiraled because of increased competition for the limited number of aircraft available. For those who were working on the cleanup, these increased costs were a temporary nuisance, but for those who were the

longer term residents without cleanup jobs, these increased costs were a hardship in a town that is already known for its relatively high cost of living.

Real and potential income shifts are also an important quality of life change in Cordova. Those who leased boats to Exxon or who worked for VECO sometimes made relatively large sums of money that were used for both personal and business purposes. This usually resulted in the perception of an increased quality of life in Cordova. For others, there was also a perceived threat from the consequences of the spill that raised questions about the long term viability of a fishing way of life in Cordova. If fishing was damaged and if this damage was long term, then clearly there was no need to buy a new house or plan to raise a family in the community. The only thing to do was to make short term money and leave. Early in the spill these fears were palpable. Later these concerns were still expressed in statements about the uncertainty of long term effects and expectations about the effects of the spill lasting well into the future. Clearly, for some Cordovans the possibility of continuing a fishing way of life, of the community event continuing to exist was in question. As one informant observed, "If the fishing goes this town will just slide down into the harbor and the trees will take over again."

Effects on Community Integration

The literature about disasters reports that usually there is a "therapeutic community" that develops in response to catastrophic circumstances. The essence of the idea of a therapeutic community is that people help one another to recover the damage they have experienced. In Cordova there were the beginnings of this type of response. As one informant observed, "The people were amazing . . . they were great . . . The people in this town got right together. I mean every organization volunteered people, I mean if you needed 14 volunteers they were there . . . and when the town got together to have a town meeting the TOWN would be there. " Interviews with Cordovans also indicate that there was a substantial amount of volunteerism, cooperation and mutual concern that helped the community in the early days. For example, there was a Sound Love program in Cordova in which children and others that cut out paper hearts to paste on walls and doors and to give to friends and neighbors. The intent of these hearts was to remind Cordovans of the need to pull together to overcome the effects of the spill and save the Sound. Also, there were plans to enclose letters in the food and other packages sent out to oil spill workers as a way to thank them for the work they were doing. A children's task force was also organized to address the special needs of children and to provide support for parents who worked long hours on the spill. There efforts were the threads of cooperativeness that tied Cordova together throughout the spill effort, but alongside this there was also divisiveness and conflict that segmented Cordova.

A dominant theme in interviews about the effects of the oil spill on Cordova mentions the conflicts that developed from participation in the cleanup effort organized by Exxon and

executed by VECO. One source of conflict was value based and the other economically based. In regards to the value conflicts, there were individuals who took the stance that working for Exxon or VECO was improper, if not immoral. Part of this opposition was based in historical antagonism against the oil companies, but much of it derives from feelings that the cleanup was busy work or that it was not meaningful. Some examples from informants give the flavor of these perceptions: "There was a lot of frustration because most of the work that was done was quite ineffective. For show. Most of it was standing around and uh, 'Go anchor there and stay out of sight till we call ya. You'll get paid anyway.'" And, "Well, I got my check today. There's three kinds of money-getting handed out here. There's clean up money, there's contract money for boats, and then there's blood money. Of all things I got my blood money . . ." Other Cordovans resented any cooperation or participation with the VECO cleanup because they believed this effort to be corrupt and anyone who was involved had "sold out to Exxon." Others took a different moral view that "soaking Exxon" was as wrong as taking cleanup money for not doing cleanup work. These different moral positions resulted in divisiveness and conflicts within Cordova. A consequence of these conflicts and divisiveness was an erosion of a developing "therapeutic" community that could provide support to its members.

The economic aspect of conflicts is a pervasive theme about the effects of the spill and cleanup on the community. For example, one Cordovan observed "A lot of greed took over and people's outlooks and perceptions of friends and material things changed. Big money made the change." Part of the problem was the perception that there was differential access to the opportunities to make big money based on "who you were or who you knew." Differential access to these monies in a time when there were and are fundamental questions about the long term viability of fishing resulted in intense concern about and attention to who was getting the lucrative cleanup jobs and boat contracts. As one informant observed, "It . . . quickly became very competitive as to who was going to get to go out and start earning money . . . (there was) fear and anger about the possible loss of their livelihood for a year at least and possibly for as much as ten years. Everybody's imagination went wild and the worst case scenario came to the surface."

The results of these animosities varied from the severing of friendships and the alterations of social networks to a deep sense of conflict and divisiveness within the community. These kinds of feelings and the segmentation of the community have important implications for support networks within Cordova.

Mental Health

The occurrence of different types of psychosocial problems such as crime, substance abuse, and domestic violence is deferred to a future time in favor of a brief presentation of preliminary findings about symptoms of psychological impacts in Cordova.

Sub-clinical problems with stress, anger, frustration, anxiety, fear, and other such emotions were and are part of the experience of Cordovans with the oil spill. Interviews with varieties of informants reveal comments on the levels of stress and upset that the community experienced. Indeed, interviews conducted in the summer of 1990 in Cordova suggest that some individuals are only now beginning to experience the psychological consequences of the spill. As one informant observed, "Last year I was just too wrapped up in what was going on, too busy to sit down and think. That went on for a long time and its only now that it is hitting me. I sit on my boat a lot now and just try to keep out of the way. Its the stress . . ." Another person observed, 'I just don't have the reserves to deal with the usual things in my life. now. I can't give my kids the attention they need, I can't give my husband the attention he needs. He just sat me down the other day and told me that this is really upsetting everyone, how I am reacting. The other day for the first time in my life I slapped someone. It was my girlfriend. I have never done that before. It was the first time in my life. I guess the emotions are just too close to the surface right now.' Similarly, another person commented that many of his friends experience anger and frustration over the lack of control they had over their lives the last year because of the disruption of fishing and the way the cleanup was managed. These comments and observations do not suggest psychopathology. However, they do suggest that individuals continue to experience personal distress that disrupts their lives and affects their abilities to function as workers, parents and friends. These are issues that have consequences for the ability of a community to repair itself and move ahead with the reintegration of its citizens into a supportive community.

Other possible indicators of psychological impacts related to the oil spill and cleanup are (1) mental health clinic statistics, (2) findings from our household survey, and (3) findings from a study conducted by the Valdez Counseling Center that compared Cordova and Valdez for symptoms of depression and post traumatic stress disorder (PTSD). Before briefly reviewing these issues, a word of methodological caution is in order. First, clinic statistics can be misleading regarding the occurrence of psychological symptoms because, among other reasons, not everyone who experiences distress seeks counseling. Furthermore, in the case of Cordova, there are a limited number of mental health counselors and they already had substantial case loads before the spill thus it was unlikely that large numbers of new cases could be accommodated. Consequently, clinic statistics can only be a rough indicator of psychological impacts. Second, the Valdez Counseling Center is to be commend for its study, but it should be remembered that the use of a mail (as done by the Valdez Counseling Center) often results in the self-selection of responses and this may skew findings. Third, the findings from the Oiled Mayor's household survey are still preliminary and require much further analysis to be used as a valid indicator of psychological impacts in the community. With these words of caution in mind, the discussion below briefly develops the issues from these various data sources.

The Valdez Counseling Center study sampled residents in Cordova and Valdez for the symptomology related to depression and PTSD. This longitudinal study sampled 43 Cordovans (20 males and 23 females) and 50 Valdez residents (16 males and 34 females)

at three different points in time. The table below displays percentages for scores in each of the four categories at three different sampling points.

	Time 1		Time 2		Time 3	
	Cord.	Vald.	Cord.	Vald.	Cord.	Vald.
PTSD						
None	51.16	50.0	46.51	58.0	55.81	70.0
Mild	27.91	32.0	30.23	26.0	27.91	20.0
Moderate	11.63	10.0	20.93	12.0	11.63	6.0
Severe	9.30	8.0	2.33	4.0	4.65	4.0

What is indicated in this table is that PTSD symptomology steadily decreased in Valdez but not in Cordova. More PTSD symptomology occurs in Cordova than in Valdez, and over-all the symptomology is more severe in Cordova.

The Valdez Counseling Center also used the CESD scale for measuring depression. Mean scores for depression symptomology at two different points in time are 6.48 and 10.47 for Valdez and 9.023 and 3.88 for Cordova. These numbers are roughly comparable to the findings using the same instrument in the Oiled Mayors household survey. As we reported earlier, Cordova and Kodiak were among the highest scoring communities for depressive symptomology in our preliminary findings. What these statistics about depressive symptomology suggest is that there are some psychological conditions in Cordova that require attention. Also, the relationship of these symptoms of depression and PTSD to the oil spill and cleanup needs careful consideration.

Our preliminary examination of statistics from the Cordova Mental Health Center indicates no substantial increase in the number of client visits during the actual cleanup period and in the fall months immediately following the end of the cleanup. However, interviews with clinic staff do suggest that existing clients sometimes consumed more staff time than usual and that clinic cases were more severe during this period. And, whereas there would usually be only 1 or so referrals to inpatient facilities outside of Cordova, during the period of the spill and cleanup there were about six such referrals and at least three of these were oil spill related. Given the findings from the surveys conducted in Cordova and our preliminary examination of client visits in Cordova, it would appear that there are unmet mental health needs in the community. That is, survey findings suggest that there are more individuals with potential symptoms of psychological distress in the community than are receiving treatment. Again, these are preliminary findings that require more intensive consideration in future analyses.

City of Whittier

Whittier is unique for many reasons which make it problematic to classify with other communities in the study. Whittier is located on the Kenai Peninsula at the head of Passage Canal on Prince William Sound, 75 miles southeast of Anchorage. Paradoxically, although the community is close to Anchorage, the largest city in Alaska, in many respects it remains isolated. This is because there is no road access to Whittier. Besides boat, the only other year-round access Whittier is via the Alaska Railroad from Portage, a twenty minute ride about two thirds of which is in a tunnel that runs beneath the mountains and Glaciers that deny Whittier road connection. There is a small airstrip in town but it is not maintained throughout the winter.

Whittier was created as a port and petroleum delivery center in 1948 by the U.S. government to create an efficient transportation link with military bases farther north. Since the military and federal government relinquished direct control of Whittier, it has become a fishing and recreational port. The population of Whittier is about 206, composed mainly of non-Natives. Residents live in either of two buildings that were constructed at the time Whittier was created. In addition to the relatively small number of residents, a significant number of transients seasonally inflate the population. The harbormaster estimated that 300,000 people pass through Whittier every summer. Whittier's harbor is 685 feet deep and can accommodate large ships such as cruise liners and barges. Whittier receives some revenue from this source. Very little of Whittier's revenue comes from property owners since a large percentage of the city is owned by the state or federal government.

Whittier has a stable fleet nearly as large as its population, but out of 200 permanent boats in the harbor, only six have Whittier addresses. These boats belong to recreational owners, charter boat operators, and fishermen. While some of them own a condominium or rent an apartment during the summer months in Whittier, this figure indicates that a substantial portion of the private sector revenue in Whittier comes from people who do not live in town on a year round basis. This had important implications for the distribution of impacts resulting from the oil spill.

Employment in Whittier comes from the city government, the Alaska Railroad, commercial fishing, and a few private businesses. There is also a substantial amount of seasonal employment in Whittier. The two fish processing plants hire between 50 and 80 people in the summer and there are a number of commercial fishing-related jobs.

Response Effort

Exposure to the Oil Spill

Passage Canal, the head of which is where Whittier is located, was not oiled. According to a number of local residents, this was a miracle because the typical spring winds head straight into town. However, areas in the sound outside of Passage Canal were fishing areas for many of Whittier's boat owners. Oil threatened to contaminate, or did contaminate, many of those areas.

Local Response Effort

In Whittier, the local response effort consisted primarily of members of two groups. Significantly, both of these groups emerged after the oil spill. The first to organize was the Emergency Operations Committee (EOC). (This group officially joined the ranks of VECO on April 5th but its membership remained intact.) The EOC was made up of six community volunteers. Most had worked, or were working, in community service positions. The second group to organize was the Deckhands' Association (DA). Like the EOC, they were formed in direct response to the oil spill. However, unlike the EOC, their organization had an explicit political agenda. The group was composed, at least at its inception, solely of displaced workers from the fishing boats and the two seafood processors in town. Together with the city government, these disparate groups worked in pursuit of mutual interests.

The EOC set up phones and a fax machine in the fire station/public safety department building within the first week of the spill. The committee members were natural candidates for participation in the EOC since many of them held public service posts and were active and knowledgeable about the community. On April 5, 12 days after the spill, a VECO "area manager" came to Whittier to coordinate the hire of employees and boats for the cleanup. She immediately hired the six members of the EOC each of whom worked six hours per day, seven days per week. Consequently, the EOC was disbanded and former members became VECO "resource data collectors." Their job was to gather all the necessary employment information from the many hopeful VECO applicants.

The Deckhands' Association was organized on a small scale March 29, 1989 by displaced workers from fishing boats and the seafood processing industry. While most of the boat owners were able to lease their vessels to Exxon, and thereby recover some of their losses from not fishing, the deckhands and processing workers were unemployed and apparently without recourse, until they organized with specific goals and an agenda. Their most immediate concern was to seek recognition by the Exxon Claims representative for loss of employment. Members of the group were successful in obtaining compensation for lost wages as long as they could get verification from their skipper or foreman that they were working at the time of the spill, and were terminated because of it.

In addition, the Deckhands were concerned about protecting the nearby waters. They believed that as deckhands they possessed a repository of specialized knowledge of the coastline, wildlife habitats, and spawning streams in the area and could provide valuable assistance in the cleanup. So members of the Deckhands' Association became involved in requests made by the Whittier city council for protective booming. In December 1989, on behalf of "local fishermen, charter operators, and recreational boaters of the Whittier areas," the Deckhands Association produced a boom plan for Passage Canal, Cochrane Bay, Culross Pass, Port Nellie Juan, Ester Passage, and Port Wells. The boom plan details the locations of spawning streams and the amount of boom that would be necessary to adequately protect them. The Deckhands requested that the necessary amount of boom be stored in Whittier so that it is on hand in the event of another emergency. All residents of Whittier are united in the hope that information of the type included in the Deckhands' Boom Plan will encourage Alyeska and the state to recognize Whittier as a vital resource in any future emergency.

The Deckhands' Association remained intact into the winter because,

after the September demobilization of VECO/Exxon personnel there was no location in Whittier to get information about spill-related activities and no forum in which to voice our concerns. We found that many people in the community still worried about how prepared we were in our area to respond to a future spill that may again threaten our livelihoods and the Prince William Sound environment.

Whittier Volunteer Oil Spill Response Group - Proposal letter for funding from the Alaska Conservation Foundation.

The group worked throughout the winter with Alyeska on developing a community response center in Whittier. The Deckhands also made a strong showing at the public hearing on Alyeska's oil spill contingency plan. According to the VECO representative who later became Whittier's Department of Environmental Conservation (DEC) Winter Program Coordinator, 29 residents turned out for those hearings, more than in any other Prince William Sound community.

The efforts of the Deckhands' Association to make Whittier a nucleus for any future cleanup operations dovetailed with the goals of the mayor, the city council, and the majority of the community. Whittier was not recognized by VECO, Exxon, the state or federal government, or other Prince William Sound communities as a potential center of operations or even as a community that needed to be informed and updated on the spill response. Such recognition is seen by the community as critical to Whittier's economic development. As the DEC Winter Program Coordinator said, "... oil spill response as an industry is a growth

industry in Alaska and . . . there are opportunities for economic development in oil spill prevention and response plans that Whittier, because of its location and . . . its accessibility [to] Anchorage, is in a position to benefit from."

Exposure to VECO/Exxon

The person who dealt directly with Exxon on behalf of the community was the city manager of Whittier. He was not at that position when fieldwork was conducted, in March of 1990, so information in this regard is limited. However, during the first week after the spill when the city manager was out of town, the mayor called Exxon to inquire about obtaining boom to protect their waters and "...they said there wasn't any oil in our immediate area so they didn't figure this was a priority - well to us it was a priority because it was hitting our fishing spots . . ." That was viewed by the city as an uncooperative and antagonistic response by Exxon.

One interaction that was potentially fruitful between Exxon and the city of Whittier was Exxon's interest in leasing the local incinerator to burn oily debris. Exxon did pay to use the incinerator a few times but would not sign a lease until the incinerator was approved by DEC as environmentally sound. When DEC personnel visited the site and found contaminated soil around the incinerator, Exxon halted use of it. The City has requested DEC specify what will be needed to make the incinerator operable. The City then plans to raise the necessary funds to clean it up and perhaps lease it as a source of city revenue.

During the cleanup period VECO had an important presence in Whittier, despite running very few cleanup operations directly from there. One reason for this was that all six members of the EOC were hired as VECO employees. Hence, VECO, as an outside institution, was immediately integrated in to the folds of the community. Another reason was that the VECO "area manager" was very interested in harnessing the expertise of the local people. She believed that a successful cleanup operation was impossible without the contribution of their knowledge of the land and community.

The Whittier VECO office served as a resource for the VECO's Valdez operations center. People and boats were hired from Whittier and then sent on various task forces. The VECO representative reported that she would receive an order from Valdez that 60 people would be needed in the next two days. She would put up an announcement for these openings and "everybody would quit their jobs and apply." This was a problem for the few private businesses in Whittier and the city government in particular. (The representative suggested that employers pay their employees \$16.69 per hour and later file a claim to Exxon for losses incurred as a result. Those problems will be discussed in the section under local government.)

Because so many of the people in Whittier affected by the spill were not year round residents, such as charter boat owners, fishermen, deckhands, and processing workers, there was a lot of discussion among members of the community, VECO, and Exxon about what the residency requirements would be for hiring. A classification called "transient residents" was set up to accommodate this large segment of Whittier's economic base and allow for fair hiring.

Local Government

Lack of Communication/Information

One of the main constraints on Whittier's ability to function smoothly was the lack of information coming into the community, especially in the first few days after the spill. Daily newspapers are not available in the community. The only telecommunications service received by Whittier is the Rural Alaska Television Network (RATNET) station. However, the RATNET reception was sporadic during the days immediately following the oil spill so the main sources of information for residents came from Seattle newspapers arriving in Whittier on boats responding to the spill. In addition to the lack of information from the news media, the mayor was not notified by any authority, formally or informally, about the spill. The onus was on the mayor to find out what was happening with spill response and this initial insensitivity to the needs of the community was a source of resentment. However, the mayor was a member of the soon-formed Oiled Mayor's committee and, as such, was kept informed about the concerns and problems of other mayors from affected communities. The mayor also reported no problems in her contacts with the state or federal agencies and, in fact, met with Admiral Yost of the Coast Guard several times.

Contributing to the initial constraints on effective local government functioning was the absence of the city manager in the first week of the spill. This put pressure on the mayor to make executive decisions that normally would have been made by the city manager. Reportedly, caution in decision-making was seen at times as ineffectiveness by the community. For example, local residents wanted the mayor to grant them permission to cut timber for log booms. After calling DEC to make inquiries about its legality, ultimately the mayor refused to allow the timber in question to be cut because it stood in the Chugach National Forest. As a result, some people accused her of not doing enough.

Excessive Demands on Local Government

Everyone in Whittier's city government worked long hours in the months following the oil spill. Because the city manager was necessarily devoting most of his time to oil spill-related work, the normal city business went undone. In order to address this, the city council waived the ordinance that prohibited the mayor from receiving compensation, and Exxon

agreed to pay her as an administrative assistant to the city manager. She essentially ran the city in place of the city manager for the first two or three months after the spill. There were quite a few additional city jobs created in response to the oil spill. Evidence of these new positions was found in the added work done by Whittier's payroll person. There were twice as many paychecks during those months. Almost a year after the spill the burden of these added employees was felt when the payroll person made out the annual W2 forms. Whereas there were typically 20 city employees and 20 W2 forms to send, 70 W2s were sent for 1989. The 350% increase in the number of W2s occupied a significant amount of the payroll person's time.

The demands on the city government were also felt outside the payroll office. In a report to the mayor and city council of Whittier, the police chief summarized the activity of the Department of Public Safety for calendar year 1989 and 1988. Jumps in service levels, in nearly every category, were attributed to oil spill-related circumstances. The summary included all police, fire, and emergency medical service calls and is reproduced below:

<u>Classification of Event</u>	<u>1988</u>	<u>1989</u>	<u>Increase or <Decrease></u>
Total calls for service (a)	337	1,357	302.67%
Felony arrests	4	3	<25.00%>
Misdemeanor arrests	35	87	148.57%
Felony cases reported	8	5	<37.50%>
Misdemeanor cases reported	71	163	129.57%
Detoxification holds	(b)	54	
Incidents (noncriminal)	157	215	36.94%
Medical assistance	52	101	94.23%
Fire Calls	10	8	<20.00%>
Alcohol-related calls	10	70	268.42%
Domestic violence calls	3	12	300.00%
Disturbances	14	76	442.85%
Motor vehicle accidents	8	26	225.00%
Traffic citations	(b)	99	
Outside agency assist	11	22	100.00%

Notes: (a) Total calls for service will not equal the total of all other reported events, as some calls were unclassified.

(b) Statistics not available for calendar year 1988.

All of this activity added up to a large number of overtime hours. At a base pay of \$28,000, one of the patrol officers earned \$40,000 in 1989 because of overtime hours. That increase resulted from 594 hours of overtime most of which was worked between May and

September of 1989. The amount of overtime worked was corroborated by reports from one of Whittier's patrol officers who reported working six ten-hour shifts per week. Between 10:00 p.m. and 2:00 a.m. two to three officers would be on duty. Between May and September the department received eight to fifteen calls on a typical day shift and one to two calls during the evening hours. In contrast, the department typically received an average of five calls per week in the winter.

Another city department that was affected by increased activity from the oil spill was the Whittier Medical Clinic. The Whittier Medical Clinic is staffed by a physician's assistant (PA) and a receptionist who is also the captain of the volunteer Emergency Medical Service (EMS). Although the increased activity was not necessarily apparent from the clinic records, the PA reported an unprecedented workload and job-related stress. One of the main reasons for the increased load was that the receptionist was frequently called out on emergencies in her capacity as an Emergency Medical Technician (EMT) II. Consequently, the PA was left to run the clinic on her own. In addition, she was on call 24 hours per day. Although this is not unusual, the number of call-outs she was receiving during the night was. Because of the continuous demands on her time, the PA was unable to maintain record keeping, which is why an analysis of the clinic records does not reveal the high level of activity. At least half the overtime worked was not tracked because the clinic was too busy.

During the active phase of the cleanup, the demand for the PA's services came primarily in the form of injuries and accidents. Often these problems were the result of people's "bizarre behavior" caused by alcohol or drugs. Although some of these injuries affected locals, most of the patients were not from Whittier. After the summer, the bulk of cases seen at the medical clinic were mental health-related. The PA was unable to provide the mental health services demanded by the community because she had neither the time nor the qualifications. Although there are qualified professionals that come into Whittier twice a month to counsel clients, there is frequent turnover in these positions. The PA reported that the lack of adequate mental health care has been a problem in Whittier for a long time but the situation has become critical because of the effects of the oil spill. The mayor expressed the same concerns.

The EMS did not lose any volunteers but a few firemen were lost to VECO. Immediate replacement of the firefighters was impossible since there is no training during the summer. During the winter of 1989 interest in EMT certification was high and the EMS captain trained nine EMTs, but the captain expressed concern that those people recently trained will leave to work for Exxon in the summer. The city invests a lot of money in training people, so it would be a loss if the new EMTs did not provide services for the community.

The harbor was another department that suffered excessive demands following the oil spill. Typically, the city hires temporary help in the summer because the harbor gets so busy, but because of the high wages paid by VECO on the cleanup, the harbor was unable to find employees. This alone added to the work load at the harbor. In addition to this, the

department lost two trained permanent employees to VECO on July 4. Exxon offered to pay for two replacements but the harbormaster refused to train and supervise employees who would be earning a salary greater than his. Consequently, those who remained at the harbor worked long hours. They were scheduled six days per week, ten hours per day. The harbormaster worked for five straight weeks after the spill without a day off. Exxon reimbursed the city for his overtime.

Aside from staff problems, the harbor was more crowded than usual. This was not due to an increase in the number of vessels. Rather, it was because of the larger size of the boats needing to enter the harbor which was only designed for small fishing boats. There were three times as many 38' to 58' boats in the harbor as usual because most of the smaller boats were leased to Exxon. Consequently, a line built up outside the breakwater. These boats would anchor while waiting for a slip. A few times the harbor employees had problems with the anchors slipping and unmanned boats drifting off. Finally, there were some problems with people washing their oily boats in the harbor area, which was against city ordinances.

Loss of Staff/Council Members

In addition to the two harbor employees mentioned, the magistrate was the only other public employee to resign to work for VECO on the cleanup. Although three positions seems like a small number, the losses were significant to the city administration. They were so significant that the city passed an ordinance at the time which said anyone quitting his job at the city to work for Exxon, VECO, or any other contractor was prohibited from ever working for the city again. This ordinance reflected the bitterness felt toward those people who left their \$12 an hour jobs with the city to take \$16.69 an hour jobs with the cleanup.

Loss of Grants and Interruption of Projects/Regular Functions

There was quite a bit of work that was deferred by municipal departments as a result of the oil spill and cleanup activities. In the harbor area, building improvements, cleaning up of the grounds, and other routine maintenance was not completed as planned. At the camper park, the brush was never cut back. Routine road maintenance was not done. The roof of the utility shop went unrepaired. The mayor expressed concern the following spring that the weight of the winter's snow might have caused the weak roof to cave in. The visitor's center was supposed to have been painted. According to the mayor, "VECO decided they would do that for us. Well they never finished it, so it sits there half painted and the shop crew couldn't get to it."

In addition to work that was deferred, there were a number of grants that the city was unable to apply for because personnel were tied up with oil spill-related work. These were

grants that would have helped fund improvements to the camper park, which is important for city revenue, and the medical clinic.

Interactions with Extra-Community Institutions (Political and Corporate)

Although the members of the EOC, who later became VECO resource data collectors, were not affiliated with any formal institution following the demobilization of VECO, many of the former members remained active in the DEC Winter Cleanup Program. This program was coordinated by the same person who had been VECO's area manager for Whittier. Her affiliation with VECO ended July 15 and she left the community. When she returned to Whittier in September she was invited by the city to be the DEC local response coordinator.

Interactions with Exxon employees were not cordial in the fire hall/public safety department building. According to one officer, although Exxon had rented some of the space in the building, they proceeded to take over more than their share. Oil spill equipment such as boats and cars belonging to Exxon and VECO were left in front of the ambulance and fire truck. During one call-out these blocked the emergency vehicles. Further, when Exxon (and VECO) demobilized they reportedly left their rented area "in shambles."

Changes in Community

Community Overwhelmed

The general routine of life in Whittier during the summer is busy. But the summer after the oil spill was not like any residents had experienced before, especially those residents who were employed in city service jobs such as harbormaster and patrol officer. Those individuals worked long shifts, were often on call 24 hours a day, and went for weeks without a day off. The presence of those seeking employment on the cleanup was felt acutely by the patrol officers in the building that houses the fire hall, the public safety department, and, for that spring and summer, housed VECO and Exxon. According to one of the patrol officers, 40-50 people a day were coming into the building. It soon became known as the "VECO/Exxon office" - not the public safety office. In the beginning there was a rotation of oil spill workers, but toward the end of the summer there were not as many people going out to work causing the number of people in the building to increase. They waited in the day room and even slept there waiting to be hired. The officers found transients sleeping in the jail room. For a month after the demobilization transients loitered in the building and watched TV.

Changes in Social Relations

Perhaps the most dramatic change in social relations resulting from the oil spill was caused by those individuals who spontaneously left their jobs to earn higher wages working on the cleanup. According to one city official, this "created a lot of ill will" and, as mentioned above, the city passed an ordinance prohibiting those who left city jobs to work for VECO from returning to work. Obviously private employers had no such recourse for venting their anger, but tensions were reportedly high.

On the positive side, a number of informants noted that the community pulled together during the crisis. People were surprised at the solidarity that was achieved. Formerly unrelated, distinct groups suddenly found themselves with mutual interests and worked together to achieve them. Interest in assuring that Whittier is prepared for any sort of emergency in the future is now one of the primary goals of all facets of the community.

Crime

Total calls for law enforcement services were up from 337 in 1988 to 1,357 in 1989, a 302.67% increase, indicating crime was a big problem in Whittier during the summer following the oil spill. Although the statistics from the public safety department are not broken down by month, the reports from patrol officers make it clear that the bulk of the increase in crimes occurred between May and September of 1989. The category of "disturbances" increased most dramatically in 1989. They went from 14 in 1988 to 76 in 1989, an increase of 442.85%. These statistics testify to the chaotic atmosphere of the community that many informants commented upon.

Way of Life

There were a number of commercial fishermen who fished out of Whittier who expressed concern about the future of the Prince William Sound fisheries. One couple reported having bought a commercial fishing license just prior to the oil spill. Like a number of other fishermen, even though they were able to lease their boat to Exxon and made a substantial amount of money, they expressed the strong opinion that they would rather have fished and that a great deal of uncertainty about the future of the fisheries remains.

Whittier is a hub for the transport of hazardous materials and the site for storage of large quantities of fuel. The oil spill and ensuing chaos surrounding the cleanup raised questions in residents' minds about their own response capability to hazardous materials accidents and emergencies. A number of informants believed that the response to the Exxon *Valdez* oil spill was proof that the community is not prepared for an emergency within its own city limits. Lack of road access into the community was cited as contributing to Whittier's lack

of preparedness. Whittier has an Environmental Commission and it is their responsibility to keep informed about the status of environmental issues in the community. For example, the Environmental Commission is in charge of getting the incinerator in safe working condition.

Mental Health

Domestic Violence

Most informants did not discuss domestic violence specifically as a problem. The PA did comment that many instances of domestic violence go unreported. However, referring to the Public Safety activity report above, domestic violence calls went from three calls in 1988 to 12 in 1989, an increase of 300%.

Drug and Alcohol Abuse

The EMS received a lot of 3:00 a.m. and 4:00 a.m. calls that were drug and alcohol related. One EMT believes that the town went from excitement about the financial opportunities created by the oil spill to drug and alcohol abuse. From her vantage point she commented, "we have only begun to see the social impact of the oil spill as people spend their loot from the summer." Others echoed this belief. These observations are corroborated by the statistics from the Public Safety activity report above which shows that alcohol-related calls were up 268.42% from 1988. The PA attributed the rise in part to the large amounts of money earned by residents from working on the cleanup.

Service Provision

As discussed above, the provision of mental health services in Whittier was mentioned as a serious problem. According to the PA the demand for counseling has been unusually high since the oil spill and her ability to provide such services herself almost impossible. There is a professional counselor who comes to Whittier every two weeks, but the frequent turnover in personnel reduces the clients' willingness to continue with therapy.

Stress/Depression

Stress was reportedly high among individuals from all sectors of the community. City employees reported suffering from burn-out from working many consecutive 60+ hour weeks. Fishermen reported feeling depressed and anxious because of the uncertainty of the future of their livelihood. And an EMT reported that morale among fishermen was very

low. The impact of these feelings on residents was evidenced in the increased demand for counseling services.

Medical

Evidence of the increased activity in the community was reflected in the demand for various services during the summer of 1989. The PA has her own small lab and a portable x-ray machine. Demand for use of this equipment was higher than usual, based on reports by two of the medical officers. Things physically couldn't be taken care of at the medical clinic because of the large volume. The increased demand is also revealed in the public safety statistics which report an increase of 94.23% in medical assistance calls over 1988.

Village of Chenega Bay

This small community of approximately eighty-four people is located on Evans Island thirty miles south of Bligh Reef where the *Exxon Valdez* ran aground. This predominately Native community has approximately ten non-Native residents. The community has no airstrip, but it has a small boat dock and is accessible only by float plane and boat. Chenega Bay is an unincorporated community governed by a Village Council. The villagers are dependent on a mixed cash-subsistence economy. The former community of Chenega, located on Chenega Island, was totally destroyed and one third of its inhabitants killed by a tsunami after the 1964 earthquake. The community was abandoned immediately thereafter and was not re-established at its new site until 1984.

Response Effort

Most residents became aware of the spill from television news broadcasts. At first, many were not concerned because the spill seemed far away, but residents who knew the tides realized that their community was in danger. As the spill neared Knight Island, everyone realized the spill would hit their shores before long. Within three or four days after the spill, press from all over the world began landing in helicopters in front of the community center. By March 27th, Evans Island was surrounded by the oil. Chenega Bay was the first community hit by oil from the spill. All of the waters and shores of the village were oiled. It was a devastating blow to a community that relies heavily on subsistence activities for their food and the continuance of their cultural traditions.

About twenty volunteer boats from the Cordova District Fishermen's Union (CDFU) arrived by Tuesday in an effort to protect the waters of the nearby hatchery. It wasn't long before the villagers looked out on the bays surrounding their community and saw over one hundred boats in their waters. The majority of these boats were hired from the fishing community of Cordova to help protect the nearby Sawmill Fish Hatchery. Most villagers resented the non-Native boats being in their "front yard" earning money that they felt should be earned by those most seriously threatened. Their resentment stemmed from the fact that they were deprived of the opportunity to earn money as well as the opportunity to protect their waters. They felt they knew the bays and the tides better than outsiders and could best coordinate the cleanup effort. There was also considerable resentment that the focus of the cleanup activities was the protection of the nearby hatchery. Many people had a sense that if it were not for the presence of the hatchery, there would have been less effort to protect the waters surrounding their community. "They cared more about the fish than they did the humans," was a sentiment often expressed by villagers. However, there were other villagers who expressed appreciation for the early efforts of the Cordova fishermen in saving their waters.

Within this same time frame, representatives from a multitude of state and federal agencies began arriving in the community. In their initial discussions with the Office of Emergency

Preparedness and DEC, the villagers were pleased and optimistic about the assistance they would receive. A few days later they were informed by the state that Chenega Bay was being assigned low priority. Astounded by the decision, the community had representatives from the North Pacific Rim exert considerable political pressure until they were re-assigned a high priority status.

Shortly thereafter, VECO came to Chenega Bay and literally "took over." The villagers became very disturbed by this turn of events. They were "intimidated" by the corporate response to the oil spill. VECO hired many villagers and placed them on standby status. Meanwhile DEC set up headquarters in a village house and brought in boom and other materials. When DEC attempted to hire a few local people to assist them in setting up operations, the people were informed by VECO that, because they were on standby, they could not be employed by DEC. The dispute resulted in a costly delay of the DEC cleanup effort.

Almost twenty days after the tanker accident, VECO still had not delivered all the necessary cleanup equipment to the village. After a lengthy process, some twenty people succeeded in getting hired by VECO. The villagers' attempts to get their boats leased was an even more protracted struggle. It was early May before five boats were hired; but the controversy surrounding the boats did not cease. A number of villagers felt the leaders of the community were more concerned with getting their relative's boats hired than insuring all villagers had a fair chance to lease their boats. Some allege that the villagers had a difficult time getting their boats leased because of the powerful influences of the CDFU. While it is unclear why there was such a delay in hiring the boats, resentment over the process continues to linger. During the winter of 1989, someone is alleged to have taken an axe to the mooring of one of the boats that was leased. There is also continuing resentment over the employment of outsiders in the area. People continue to resent the fact that individuals from the lower forty-eight were given jobs on the cleanup crews when many regional people, both Native and non-Native were not employed.

Within a short time, the community grew from a small village of some 84 inhabitants to over 250 people. The permanent population increased by 24% and, according to one leader, "literally thousands of people passed through the community." Another villager described the experience as, "well, it just was like living in an apartment and then all of a sudden there are ten people that you don't know who come and live with you."

The majority of villagers felt that many of the negative impacts that resulted from the spill were due to the presence of the cleanup crews that frequented the community. Part of the influx was created because the community provided water and fuel at their docks. The villagers felt so uneasy about the enormous number of strangers that they began locking their doors, something that most residents on this small island community had never done before.